UNIVERSAL
LIBRARY

OU_170690

UNIVERSAL
LIBRARY

THE YEAR BOOK OF EDUCATION 1934

EDITOR IN CHIEF
LORD EUSTACE PERCY, M.P.
Former President of the Board of Education

EVANS BROTHERS LIMITED
MONTAGUE HOUSE, RUSSELL SQ., LONDON, W.C.1

CONTENTS

PAGE

INTRODUCTION 9
Lord Eustace Percy

PART ONE

SECTION ONE.—THE EDUCATIONAL SYSTEMS OF THE ENGLISH-SPEAKING NATIONS

CHAPTER

One INTRODUCTION 11
Lord Eustace Percy

Two ENGLAND AND WALES 21
Lord Eustace Percy and *Harley V. Usill*

Three SCOTLAND[1] 59

Four NORTHERN IRELAND[1] 78

Five CANADA 87
Dr. N. Hans, late Director of Education, Odessa.

Six AUSTRALIA 91
Dr. N. Hans

Seven NEW ZEALAND 99
Dr. N. Hans

Eight UNION OF SOUTH AFRICA 101
Dr. N. Hans

Nine IRISH FREE STATE 106
H. R. Chillingworth

Ten INDIA 110
Dr. N. Hans

Eleven UNITED STATES OF AMERICA 116
Dr. N. Hans

SECTION TWO.—THE EDUCATIONAL SYSTEMS OF FOREIGN COUNTRIES
Dr. N. Hans 122

SECTION THREE.—COMPARATIVE DIAGRAMS
Dr. N. Hans 169

SECTION FOUR.—THE FINANCE OF EDUCATION IN THE UNITED KINGDOM

One ENGLAND AND WALES 184
Lord Eustace Percy

Two SURVEY OF EDUCATION EXPENDITURE IN ENGLAND AND WALES DURING ELEVEN YEARS 199
Lord Eustace Percy

[1] *These chapters have been prepared by high officials, whose names, for reasons which will be readily appreciated, cannot be published.*

CHAPTER PAGE

Three SCOTLAND[1] 204

Four SURVEY OF EDUCATION EXPENDITURE IN SCOTLAND DURING TWELVE YEARS[1] 219

Five NORTHERN IRELAND[1] 240

SECTION FIVE.—LAW OF EDUCATION IN THE UNITED KINGDOM

One ENGLAND AND WALES 245
H. J. Simmonds, C.B., formerly Legal Adviser to the Board of Education

Two SCOTLAND[1] 259

PART TWO

SECTION ONE.—EVENTS IN EDUCATION IN THE ENGLISH-SPEAKING NATIONS

One GREAT BRITAIN 268
Lord Eustace Percy

Two NORTHERN IRELAND[1] 279

Three CANADA 281
Prof. W. E. Macpherson, University of Toronto

Four AUSTRALIA 294
Dr. K. S. Cunningham, Executive Officer, Australian Council for Educational Research

Five NEW ZEALAND 326
T. B. Strong, Director of Education, Wellington

Six SOUTH AFRICA 334
Dr. E. G. Malherbe, Director of the National Bureau of Education, Pretoria

Seven IRISH FREE STATE 350
H. R. Chillingworth

Eight NEWFOUNDLAND 357
Dr. Vincent P. Burke, Secretary for Education to the Government of Newfoundland

Nine BRITISH INDIA 359
Sir George Anderson, K.C.S.I., C.I.E.

Ten THE UNITED STATES 368
Prof. John K. Norton, Professor of Education, *Columbia University*

SECTION TWO.—SURVEY OF SECONDARY EDUCATION

One ENGLAND AND WALES: THE FUNCTION OF THE SECONDARY SCHOOL 383
E. Percival Smith, Headmaster, Warwick School

Two ENGLAND AND WALES: THE CLASSICS 402
J. E. Barton, Headmaster, Bristol Grammar School

Three ENGLAND AND WALES: MODERN LANGUAGES . . . 417
H. F. Collins, Headmaster, Chichester Boys' High School

Four ENGLAND AND WALES: NATURAL SCIENCE 429
G. H. J. Adlam, formerly Senior Science Master, City of London School

[1] *See footnote on page 3.*

CHAPTER		PAGE
Five	ENGLAND AND WALES: MATHEMATICS *L. Crosland*, Senior Mathematical Master, Ulverston Grammar School	446
Six	ENGLAND AND WALES: HISTORY AND SOCIAL STUDIES *F. C. Happold*, Headmaster, Bishop Wordsworth School, Salisbury	459
Seven	ENGLAND AND WALES: GEOGRAPHY *Ellis W. Heaton*, formerly Headmaster, Municipal High School, North Shields	469
Eight	ENGLAND AND WALES: MUSIC *Cyril Winn*	480
Nine	ENGLAND AND WALES: PRACTICAL SUBJECTS . . . *A. S. Bright*	485
Ten	ENGLAND AND WALES: DOMESTIC STUDIES IN GIRLS' SCHOOLS *Miss H. Sillitoe*, former H.M. Inspector of Schools	495
Eleven	ENGLAND AND WALES: PHYSICAL EDUCATION. . . *Ernest Major*, Inspector of Physical Education, Manchester	508
Twelve	SECONDARY EDUCATION IN SCOTLAND: HISTORY AND TRADITIONS *Prof. William McClelland*, Professor of Education, University of St. Andrews	518
Thirteen	SECONDARY EDUCATION IN SCOTLAND: PRESENT SYSTEM *Prof. William McClelland*	526
Fourteen	SECONDARY EDUCATION IN SCOTLAND: SOME MODERN PROBLEMS AND TENDENCIES *Prof. William McClelland*	534
Fifteen	CANADA: SCHOOL SYSTEMS OF THE PROVINCES, WITH SPECIAL REFERENCE TO SECONDARY EDUCATION[1] .	547
Sixteen	CANADA: A SURVEY OF TENDENCIES PAST AND PRESENT *Prof. F. Clarke*, Professor of Education, McGill University	557
Seventeen	CANADA: THE FUTURE *Prof. F. Clarke*	583
Eighteen	THE UNITED STATES: PRESENT TENDENCIES IN AMERICAN SECONDARY EDUCATION *Dr. W. S. Learned*, of the staff of the Carnegie Foundation for the Advancement of Teaching, New York	607

SECTION THREE.—CREATIVE EDUCATION

One	THE RE-PLANNING OF THE SCHOOLS *Lord Eustace Percy*	619
Two	THE BOY SCOUT MOVEMENT *Lord Baden-Powell of Gilwell*	634
Three	EDUCATION OUTSIDE THE SCHOOLS *Lord Eustace Percy*	644

[1] *See footnote on page* 3.

CHAPTER PAGE

Four THE DYNAMICS OF ADULT EDUCATION 657
R. S. Lambert

Five EDUCATION FOR THE COTTON INDUSTRY 668
A. A. Abbott, C.B.E., former Chief Inspector of Technical Education

Six CONCLUDING NOTE: AN EMPIRE CENTRE FOR THE STUDY OF EDUCATION 685
Lord Eustace Percy

SECTION FOUR.—THE SELECTION AND SUPPLY OF TEXT-BOOKS IN THE BRITISH EMPIRE
Hadley V. Usill 687

SECTION FIVE.—TWO CHAPTERS ON EDUCATION IN THE UNITED KINGDOM

One RELIGIOUS EDUCATION IN SCOTTISH SCHOOLS 724
Dr. W. M. Wightman, Director of Religious Education for the Church of Scotland

Two A SURVEY OF MUSIC AND MUSIC TEACHING IN THE ELEMENTARY SCHOOLS OF ENGLAND 731
Cyril Winn

SECTION SIX.—THE DOMINIONS

One THE UNIVERSITIES OF THE UNION OF SOUTH AFRICA . . 742
Dr. E. G. Malherbe

Two THE PUNJAB 782
Sir George Anderson

Three MUSLIM EDUCATION IN INDIA 797
Sir George Anderson and *Prof. K. G. Saiyidain*

Four EDUCATION IN MYSORE 817
N. S. Subba Rao, Director of Education, Mysore

SECTION SEVEN.—THE COLONIES

One EDUCATION IN BRITISH MALAYA 827
J. B. Neilson, Sultain Idris Training College

Two EDUCATION IN JAMAICA 858
S. A. Hammond, former Director of Education, Jamaica

SECTION EIGHT.—FOREIGN COUNTRIES

One EDUCATION IN AUSTRIA 873
Dr. Hans Fischl, Präsidium des Stadtschulrates, Vienna

Two EDUCATION IN SPAIN 891
Dr. Manuel Cossío

Three EDUCATION IN FINLAND 911
Dr. Alfons Takolander, Board of Education, Finland

Four THE CATHOLIC SCHOOLS OF FRANCE 927
M. le Chanoine Ch. Aimond, Directeur de l'Enseignement Chrétien, Paris

INDEX 936

MAIN CONTENTS OF 1933 EDITION

INTRODUCTION TO THE YEAR BOOK OF EDUCATION
Lord Eustace Percy

SECTION ONE. STATISTICS

SECTION TWO. FINANCE OF EDUCATION IN THE U.K.

SECTION THREE. STRUCTURE AND LAW OF EDUCATION IN THE U.K.

SECTION FOUR. EDUCATIONAL POLICY AND METHOD IN RELATION TO MODERN NEEDS

SECTION FIVE. MODERN SCIENTIFIC AIDS TO TEACHING

SECTION SIX. SCHOOL ARCHITECTURE

SECTION SEVEN. IDEALS OF RELIGIOUS EDUCATION

SECTION EIGHT. THE HEALTH SERVICES

SECTION NINE. UNIVERSITIES IN THE BRITISH COMMONWEALTH OF NATIONS AND THE UNITED STATES OF AMERICA

SECTION TEN. EDUCATION OF THE AFRICAN NATIVE

SECTION ELEVEN. THE BRITISH COLONIES: MALTA AND GOZO, HONG KONG, NEW ZEALAND AND SOUTH SEA ISLAND EDUCATION

SECTION TWELVE. THE LEAGUE OF NATIONS AND INTELLECTUAL CO-OPERATION

SECTION THIRTEEN. FOREIGN COUNTRIES

JAPAN — SOVIET RUSSIA
NETHERLANDS — SWITZERLAND
DENMARK — HUNGARY
FRENCH SECONDARY EDUCATION

MAIN CONTENTS OF 1932 EDITION

FOREWORD
By the President of the Board of Education

INTRODUCTION TO THE YEAR BOOK OF EDUCATION
Lord Eustace Percy

PART ONE. GREAT BRITAIN AND NORTHERN IRELAND

SECTION ONE. THE ADMINISTRATION OF THE PUBLIC SERVICE OF EDUCATION

SECTION TWO. THE SCHOOLS OF GREAT BRITAIN AND NORTHERN IRELAND

SECTION THREE. FURTHER EDUCATION—TECHNICAL AND ART

SECTION FOUR. THE UNIVERSITIES

SECTION FIVE. THE HEALTH SERVICES

SECTION SIX. SPECIAL SCHOOLS

SECTION SEVEN. LEGAL NOTES

PART TWO. THE BRITISH COMMONWEALTH OF NATIONS

CANADA
SOUTH AFRICA
INDIA
IRISH FREE STATE
SOUTHERN RHODESIA
CEYLON
AUSTRALIA
NEW ZEALAND
NEWFOUNDLAND
TROPICAL AFRICA
PALESTINE
CYPRUS
TRINIDAD AND TOBAGO

PART THREE. FOREIGN COUNTRIES

FRANCE
ITALY
SWEDEN
CHINA
EGYPT
GERMANY
U.S.A.
RUSSIA
TURKEY
THE ARGENTINE
CZECHOSLOVAKIA

INTRODUCTION

WITH this third volume the YEAR BOOK OF EDUCATION enters on a new phase. The first two volumes have ranged so widely over the educational systems and problems of the British Commonwealth of Nations that, while it is impossible to say that the ground has been covered, yet it would not be untrue to say that the skeleton facts of education in the Commonwealth have been fairly fully stated. This volume does, indeed, make good various omissions in the other two. For instance, the survey of Universities in the English-speaking nations contained in the YEAR BOOK for 1933 covered neither the Universities of South Africa nor those of India. The first omission is supplied in the present volume. Again, the survey of religious education in the United Kingdom, carried out in the first two volumes, is completed in the present volume by a chapter on religious education in Scottish schools from the point of view of the Church of Scotland. The present volume also carries forward the systematic survey, begun in previous volumes, of the educational systems of the British Colonies and of foreign nations, country by country. Nevertheless, so much of the framework of English-speaking education has now been sketched, and so many foreign countries have been made the subject of special chapters, that it has seemed possible to give this volume, experimentally at any rate, a somewhat different form.

Part I of this volume accordingly attempts the ambitious task of outlining the educational systems of all countries. The United Kingdom is treated at length; the Dominions and the United States in a more condensed manner, but still with some attempt at statistical detail; and foreign countries in a necessarily more summary fashion. The introductory chapters to the first and second Sections of Part I attempt some interpretation of these educational systems. In Section III of this Part an experiment has been made in the construction of certain comparative diagrams of education in leading British and foreign countries. For the rest, this Part contains the usual chapters on the finance and law of education in the United Kingdom, supplemented by a detailed survey of educational expenditure in Scotland during the past twelve years, on the same lines as the similar survey of English educational finance in the volume for 1932. The summaries of education in the British Dominions and in the United States are admittedly fragmentary as compared with the United Kingdom chapters, a defect which we shall hope to remedy in the future; but the inadequacy of the Dominion summaries is to some extent made good, as we shall see, by the chapters in Section I of Part II.

Having thus, as it were, made good and completed the framework

of facts in Part I, the YEAR BOOK proceeds in Part II to describe current events and to survey certain special features of education. Section I of this Part summarises events in the English-speaking nations during the last year or two, with special reference to the economic depression. This is followed by a more ambitious survey of one special subject, namely, secondary education in the English-speaking nations. This survey covers in more or less detail secondary and, to some extent, other forms of post-primary education in England and Wales, Scotland, Canada and the United States. This Section should be read in conjunction with pages 538–40, 544–47 and 555–60 of the YEAR BOOK for 1933 dealing with secondary education in Australia and New Zealand, as well as with other information on the subject of secondary education contained in the volume for 1932 and with various passages bearing on the same subject in Section I of Part II of the present volume.

Section III may be regarded as a first rough and hesitating attempt to focus educational problems in terms of the revolutionary change which appears to be taking place in the conditions of Western civilisation.

Section IV represents another new departure. It is an attempt at a detailed survey of a particular administrative problem: the arrangements in force throughout the British Empire for regulating the use of textbooks in schools maintained or aided by the State. For the information contained in this Section we wish to express our particular indebtedness to the Departments of Education in all parts of the British Empire who have responded most generously to the enquiries addressed to them.

The remaining Sections proceed on the lines of previous volumes. Omissions in those volumes are made good, as in the chapters on religious education in Scotland, music in English elementary schools, and the South African Universities. The survey of education in the British Colonies is extended to Jamaica and British Malaya, and the survey of education in foreign countries to Spain, Austria, Finland and the Catholic schools of France. The Spanish chapter may be regarded as taking its place in the series of studies of revolutionary education which has included, in previous volumes, Italy, Turkey and Soviet Russia. The Austrian chapter may prove of particular interest as an authoritative and up-to-date account of a "democratic" experiment which has attracted particular attention since the war.

It only remains for the Editor to express once more his thanks to his contributors and to all the Governments of the British Empire for their generous assistance.

E. P.

The Educational Systems of the English-speaking Nations

CHAPTER ONE

INTRODUCTION

THIS section seeks to give a summary and statistical survey of the educational systems of the chief English-speaking nations. It is followed by a second section, which attempts a similar survey of the educational systems of other countries. At the beginning of this second section will be found an Introduction which suggests a classification of these foreign educational systems into certain broad types. Though, as indicated in this Introduction, all these types are distinguished from the systems in use in English-speaking countries by differences both of historical development and current practice, it is much more difficult to suggest any coherent classification of the English-speaking systems.

The English Tradition

It may, however, be suggested that, in the systems of the United Kingdom, the British Dominions and the United States, there may be discerned two different lines of development which may roughly be distinguished as the English and the Scottish tradition. Before the modern development of universal popular education, elementary education in England existed, broadly speaking, only as a preparation for the secondary education offered by the grammar or "public" schools, and was therefore limited to pupils who might be expected to enter such schools. No such prospect of secondary education could be offered to the mass of the pupils in the new elementary schools which began to be established from the early years of the nineteenth century onwards, and these schools were therefore developed without reference to the old secondary school system. It was not till 1902 that a new public secondary school system was created for the benefit of selected ex-elementary school pupils, and even then no attempt was made to fit the secondary school logically on the top of the elementary school. Though the normal age of entry into the public or grant-aided secondary school was lower than the normal age of entry into the independent "public" school, the organisation of the new secondary school system followed generally the lines of the old.

The result was that the elementary school remained an end in itself; its selected pupils passed from it to the secondary school two or three years before the conclusion of the full elementary school course, and its upper forms ran parallel in age, though not in curriculum, with the lower forms of the secondary school. These upper forms ended, at best, in what used to be known as a Higher Top, a betraying phrase, for it indicated the truth that, this summit having been reached, there was nothing left for the elementary school pupil but to climb down or fall off. The technical school, the natural sequel to these upper forms, had no coherent connection with the elementary school; it tended merely to pick up the ex-elementary school pupil from the factory or the street a year or two after he had left school. Only in the last few years has a coherent attempt been made to develop a clearly defined six-year primary school course, followed by a three-, four-, five- or seven-year course in senior, intermediate or secondary schools, according to the needs of the pupil, and to make technical education the normal continuation of the senior and intermediate courses.

The main effect of this historical development has been that the unit of English education is the school, not the standard or class or grade. The school tends to have an individuality of its own, and to enjoy considerable freedom in its curriculum. This freedom is severely limited in the secondary school proper by the two "approved" examinations, and by the requirements of the universities which largely determine the character of those examinations. In other schools, outside what may be called the university hierarchy, freedom is much greater. The individuality of the school makes transfer between school and school of the same age range rare and difficult; on the other hand, it makes possible a more direct adaptation of each school to the needs of its pupils than usually prevails in more logically graded systems of education.

The Scottish Tradition

In Scotland, on the other hand, popular elementary education was inaugurated nearly two centuries earlier than in England, not long after the old grammar schools had been destroyed, or almost destroyed, by the Reformation. Elementary education thus preceded instead of following secondary education. The Scottish parish school was, in fact, both an elementary and a secondary school; it selected within itself its own promising pupils and prepared them for the university. The parish school looked to the university as the English elementary school never did. The legislation of the nineteenth century did not fundamentally change this tradition. No definite statutory distinction was drawn between the elementary and the secondary school, and the practical distinction tended to be, not between elementary and secondary schools, but between scholars doing elementary and secondary work in any school. Recently, Scotland has been engaged in a reorganisation of her

education on much the same lines as England ; but it is significant that this reorganisation took the form of the development of senior and advanced " divisions " within the existing school system. In other words, it took the form of a re-grading of scholars rather than a reorganisation of schools. At the same time, technical education had for many years been more coherently organised than in England. Though, as the result of past tradition, the university is still the focus of all Scottish education to a greater extent than in England, the four Scottish universities, by a wise stroke of policy, have been linked with four central technical institutions, and their influence has thus been made the vehicle of a sound diversification of education.

Other differences between the two traditions exist, but they should probably be regarded as arising from local circumstances rather than from divergent policies. Both countries share a strong tradition of religious education in all schools, but in Scotland the development of that education has been smoother and more natural than in England, because the division of sentiment between Established and Free Churches has been less acute. The central government in Scotland exercises a more direct control over educational administration and policy than in England, but this is probably due rather to the difference in size and population between the two countries than to any difference in tradition. The old Scottish parish school was certainly no less locally independent than any English type of school. Independent schools play a far larger part in England than in Scotland, but this again is largely due to the historical accident of the survival of the old endowed schools in the one country and their practical extinction in the other. Both countries have the same tradition of university freedom.

The English Tradition in Australia and New Zealand

Obviously, the Scottish tradition is better adapted to the needs, and indeed the necessities, of newly settled countries than the English. Where population is sparse and means of communication rudimentary, the local school must discharge the function both of an elementary and a secondary school. In such countries the English tradition is likely to prevail only by deliberate imitation, and even then only where, for special reasons, urban development takes place concurrently with agricultural settlement. In Australia, early urban development made possible the founding of endowed schools on the English " public " school model, and these schools, while setting the standard of secondary education, remained as completely out of relation with the elementary school in the " back blocks " as the English grammar school with the English public elementary school. Indeed, the Australian elementary school was even more self-contained and self-sufficient than in England, and it is only within the last twenty years or so that Australia has begun seriously to develop a secondary school system. Almost simul-

taneously, she has entered upon the same kind of reorganisation of senior elementary education as England, with a break between primary and high school or intermediate school at about the age of 12.

New Zealand has followed a rather different course. Her tradition is Scottish in the sense that she provided very early a secondary education for rural children, but English in the sense that this provision took the form of District High Schools, i.e. primary schools with a distinct secondary department. Moreover, she adopted the policy of free secondary education for all qualified pupils as long ago as 1902. She is now entering on much the same kind of reorganisation of post-primary education as England and Australia, but her newer Combined High Schools show a tendency in the direction of the American High School.

On the other hand, both Australia and New Zealand have tended, in different degrees, to adopt a more centralised system of administration than England. In Australia, indeed, all administrative powers are centralised in the State Departments of Education, and there are no local authorities in the ordinary sense of the term. New Zealand began with a system of local education boards and school committees, but their powers have been much reduced by the Act of 1914. Australia and New Zealand have also departed from the English tradition by secularising public education. In Australia, right of entry for the purpose of giving religious instruction is accorded to clergymen and others, but only outside the official hours of school meeting. In New Zealand the law has excluded the Bible and religious observance from the elementary school, but not from the secondary school; and the practice of Bible reading and prayers has apparently crept back into the newer post-primary schools in the absence of definite prohibition.

The Scottish Tradition in Canada and the United States

Canada and the United States have, on the contrary, tended to follow the more natural model of the Scottish tradition—Canada by direct inheritance, and the United States by the mere logic of her social conditions. Though both New England and the Southern States drew their original educational inspiration from England, the establishment of universal free primary education soon after the Revolution forced the country away from a tradition unsuited to her society. In Canada, it is interesting to observe both the persistence of the Scottish tradition and the changes it undergoes when an attempt is made to "rationalise" it administratively. In the Maritime Provinces of Canada, the old Scottish parish school is still actually in operation to-day. Of 1,888 pupils in the schools of Prince Edward Island in 1931 doing work of a secondary standard, 1,010 were actually in one-room "ungraded" schools. In Nova Scotia, out of 31,852 secondary pupils, 16,503 were in rural and village schools. The same tradition has been passed on to the

Western Provinces : for instance, the rural schools of Saskatchewan contained 17,485 out of 28,583 secondary pupils.

But, in a modern system of education, such schools cannot be left to work out their own salvation as the early parish schools in Scotland were left. The rationalisation of the primary-secondary school has taken the form of the universal organisation of all schools in Canada into twelve grades : Grades I–VIII being elementary, and Grades IX–XII secondary. The central Department of Education in each Province prescribes subjects of study for each grade. The Provincial inspector sees to it that each teacher adheres to this programme. At the end of the eight elementary grades, there is a centrally conducted high-school examination, and at the end of the secondary grades there is a similar examination. Universities take their matriculants from Grade XI, whether they pass from this grade through the central examination or through a special examination by the university. The normal schools also take their teachers-in-training from this grade ; and neither universities nor normal schools consider the type of institution at which the candidates passed through it. Canada has, indeed, developed a system of separate secondary schools. All Provinces, except Prince Edward Island and New Brunswick, have their High Schools ; New Brunswick its Grammar Schools and Superior Schools ; Ontario, Manitoba and Saskatchewan have, in addition, Collegiate Institutes. Prince Edward Island has one secondary school, Prince of Wales' College. But the same grade organisation applies to these schools, and those responsible for the educational statistics of Canada have consistently based their presentation of the school system, not on any differentiation between primary school and high school, but purely on the differentiation between primary and high-school grades. Consequently, the Canadian high school does not, and cannot, run parallel at any stage to the primary school ; it fits logically on the top of it.

The same is true of the high school in the United States. Here, too, all public education has, in the past, been organised on the 8–4 grade system. The difference, generally speaking, between the United States and Canada is that the elementary school is restricted to the elementary grades, and entrance into the high-school grades, in rural areas as in towns, generally involves transfer from the elementary to the high school.

This traditional grade organisation necessarily tends to subordinate popular education to a more or less rigid standard of secondary studies. Grading presupposes a more or less uniform curriculum, and any form of education which cannot be fitted into these grades tends to be forced, as it were, into a side-path outside the main educational highway. Consequently, both Canada and the United States were slow to develop any coherent system of technical education. The American high school, indeed, early took on the character of a polytechnic rather than a secondary school, but the actual establishment of a system of technical educa-

tion dates in the United States only from 1917, and in Canada from 1919. At the same time, the United States, and several of the Canadian Provinces, have entered on a reorganisation of their senior elementary education with much the same objects as England, Scotland, Australia and New Zealand. This reorganisation has, however, taken place within the framework of the grade system. The junior high school of the United States generally comprises the three Grades VII–IX, though in some cities it is confined to Grades VII and VIII and, in a few others, the range is VI–VIII, VII–X or VIII–IX. In the junior high schools of British Columbia, the range is generally Grades VI–IX. Manitoba has both junior high schools and intermediate schools. The older superior schools of New Brunswick fall into the same category, taking their pupils from Grade VII upwards. More recent movements in the same direction in other Provinces are described in Chapter Fifteen of Part II, Section II.

It must be added that Quebec, so far, at any rate, as the Catholic schools are concerned, is organised on somewhat different lines.

The Mixed Tradition of South Africa

The development of South African education, up to the date of the Union, seems constantly to have been deflected by conscious imitation of European traditions—English in Cape Colony and Natal, Dutch in the Transvaal, and, curiously enough, Scottish in the Orange Free State. The English tradition was most naturally and healthily developed in Natal, though, like Australia, Natal departed from that tradition by adopting a highly centralised system of administration. Since the Union, these traditions have been fused in a more or less uniform system not unlike that of Canada. As in Canada, the system is a graded one, the eight years of elementary education comprising Sub-standards I and II and Standards I–VI, and secondary education Standards VII–X. This grading is applied to all State and State-aided schools ; in the Cape Province, for instance, it applies equally to the high schools and secondary schools, nearly 30 per cent. of whose pupils are under the age of 11, as well as to the primary and farm schools, some 7 per cent. of whose pupils are over 14 ; and in the Orange Free State it applies as much to the six purely secondary schools as to the sixty-two combined schools with primary and secondary divisions, which account for 75 per cent. of the total number of pupils in secondary grades.

In administration, the Provinces of South Africa resemble New Zealand and the Australian States in having in great measure centralised administration. The District School Boards and School Committees have certain administrative functions, but no financial responsibility. In this, the three southern Dominions contrast with Canada and the United States, where the school district is a vital centre, both of administration and finance.

Religious Education

As we have seen, the tradition of religious education, common to both England and Scotland, has passed neither to Australia nor to New Zealand. Nor has it passed to the United States, where the principle of purely secular education has been elevated almost into a dogma. Canada, travelling by a somewhat different road, has perhaps most nearly reproduced, in this sphere, the spirit of the English and Scottish systems. Here, the Bible is generally read in the publicly provided schools, and the meetings are opened and closed with prayer, but the schools are, as a rule, strictly non-denominational, and religion is not recognised as one of the formal subjects of the school curriculum. Side by side, however, with the undenominational schools, three Provinces, Saskatchewan, Alberta and Ontario, provide for the establishment of special denominational schools by religious minorities in any school area—called separate schools. This goes beyond the English system of non-provided schools, and resembles the new Scottish system established in 1918, under which the public authority itself can be called on to provide a denominational school. As already noticed, Quebec has a special dual school system of Roman Catholic and Protestant schools.

University Freedom

The English and Scottish tradition of university freedom has, on the whole, passed to all the English-speaking nations, considerably modified, however, in Canada and the United States by the foundation of State and Provincial universities. Six out of the twenty-three universities of Canada (British Columbia, Alberta, Saskatchewan, Manitoba, Toronto and New Brunswick) are maintained and more or less directly controlled by the Provincial legislature, and forty-four out of the forty-eight States of the United States have founded State universities. The problem of maintaining the English and Scottish tradition of freedom in an age when the resources of private endowment are becoming increasingly limited seems likely to become one of the major issues of educational policy during the next few years. In England and Scotland, where the percentage of university income derived from public grants ranges from 25 per cent. in the case of Cambridge to 51 per cent. in the case of Aberdeen and St. Andrews, and 66 per cent. in the case of the University of Wales, university freedom has not been materially affected. In Canada, the question has hardly yet arisen, except in the case of the Provincial universities, for public grants account for only about 25 per cent. of all university expenditure as against 46 per cent. for all English and Welsh universities. In South Africa, on the other hand, where government grants account for just under 50 per cent. of the total income of all universities, and for as much as four-sevenths of the income of the universities of

Stellenbosch and Pretoria, the problem was noticed in the report of the Union Secretary of Education for 1931 in the following terms :

> " Must university development be left primarily to the decision of wealthy donors ? The answer of British tradition is in the affirmative. Or must the State decide first and last what universities the nation needs and must have ? Continental Europe has on the whole given preference to the view that this should be the case. North America, the land of educational experiments, is trying out both possibilities. There are, it seems to me, indications that we in South Africa might do well to give some attention to American example in this respect, and the time may come when we also shall have two distinct types of university institutions, viz. State universities, which will be mainly dependent on State support, and privately endowed universities which will get less from the State and be freer from its control. This principle of discrimination is contained in Act No. 27 of 1931, and we may find that as a result some of our university institutions will tend to gravitate towards the first type and others towards the second. I do not share the fear, which sometimes finds expression, that State financial control of higher education must necessarily curtail that spiritual liberty which a university must have. I have personal knowledge of State universities where there is no lack of liberty."

Newfoundland

Newfoundland has a peculiar denominational system of education, administered by Church of England, Roman Catholic and United Church (Free Church) Boards. The school organisation resembles that of Canada.

The Colonies

For the purpose of the present summary it is impossible to generalise about the educational systems of British colonies. English tradition is perhaps strongest in the last-created self-governing colony, Southern Rhodesia ; it is practically non-existent in Cyprus, where Greek influence dominates the whole educational system. In the West Indies, on one side of the globe, and in Ceylon and Malaya on the other, the dominant English influence, until recently, has unfortunately been rather the external examinations of English universities than any authentic English tradition. In any case, English tradition in the whole colonial Empire has had to compromise so much with racial characteristics and exotic social conditions that it has perhaps been most successful where it has worked beneath the surface instead of attempting to determine the outward forms of the educational system. Indeed, it is only within the last few years that England can be said to have begun to work out an educational policy for her colonial dependencies, and English influence must be looked for rather in this newly conceived policy than in any ancient English tradition.[1]

[1] For education in the colonies see, besides Part II, Section VII, of this volume: YEAR BOOK for 1932: Southern Rhodesia, pages 740–7; British Dependencies in Tropical Africa, pages 748–66; Ceylon, pages 767–78; Trinidad and Tobago, pages 779–91; Cyprus, pages 792–801; Palestine, pages 802–15. YEAR BOOK for 1933: Africa, pages 625–74; Malta, pages 675–86 and lxxvii; Hong Kong, pages 687–98; Samoa, pages 699–708.

India

It is, from this point of view, a tragedy that England should have relinquished her direct control over educational policy in India at the very moment when she was beginning to substitute a deliberate policy in overseas education for her older rule-of-thumb administrative practice. British India represents the English attempt to work out a problem which has presented itself in one form or another to all European nations who have had to govern what, in a very rough generalisation, may be termed " eastern peoples." That problem is the education of an official and professional class, based largely and necessarily on an imported culture and an official language, side by side with a more popular system of vernacular education. Unfortunately, English secondary and higher education in India preceded by too long an interval the development of a basic system of vernacular education ; and, though English orientalists may be said to have taken the lead in the revival of traditional Indian culture, the idea of making the higher schools the vehicle of a reconciliation between English and Indian culture hardly entered the mind of English administrators.

Though admittedly dealing with simpler conditions, there seem to be greater elements of unity in the French treatment of this problem in Algeria, Morocco and Tunisia. For instance, the *medressas* of Algeria, which serve as a training-ground for the public services, are based on a combination of Arabic and French studies which fit them also to train teachers for the old Koranic schools, the *moudarrès*, and thus to convert those schools gradually into preparatory schools for the *medressa*.[1] British administration in Palestine is working tentatively towards a similar unity, and the Sudan, after beginning, like Egypt, on the Indian model, seems now to be attempting, at least on paper, to move in the same direction. The multiplicity of Indian languages creates a special difficulty and accounts largely for the dominance of the English language in education ; but, in spite of this, the future of India depends on the development of a new autochthonous tradition of popular education, though the tendency both in Bengal and in Bihar to convert middle vernacular into middle English schools indicates the reluctance of large sections of British Indian opinion to face this task. It may be that the lead towards a reconciliation of the two cultures will come in future from advanced Indian states like Hyderabad and Mysore, rather than from British India. Osmania University, Hyderabad, already represents an experiment in this direction in the sphere of Moslem education.

New Policies

One thing, at least, will have emerged from this brief conspectus. The traditions of the English-speaking nations are now tending to give way to a new planning of education, at once more rational and

[1] See EDUCATIONAL YEAR BOOK: International Institute of Teachers' College, Columbia University, 1932.

more diversified than in the past. Even where old traditions have diverged, the new schemes tend to converge. In England, Scotland, the United States, Australia and New Zealand, the convergence seems to be towards a more or less diversified system of intermediate and secondary schools based upon a six-year primary school. In the United States, the diversification has not yet expressed itself very much in variety of schools, as the grade system continues to dominate the junior high school, but the establishment in some States, such as Massachusetts and New Jersey, of a separate system of full-time trade schools or vocational schools indicates the new trend. Though the junior high school has made its appearance also in Canada, both Canada and South Africa still tend to retain an eight-year primary course followed by a four-year secondary course. In South Africa, the median age of pupils in the highest elementary standard, Standard VI, is about $14\frac{1}{2}$, and in the lowest secondary standard, Standard VII, about $15\frac{1}{4}$, and the corresponding figures for Canada are probably not very much lower. Both Canada and South Africa are, however, developing a new system of vocational schools. This change of policy in the English-speaking world is still only in its infancy, but it will probably be recognised in the future as the main distinguishing characteristic of the education of the great English-speaking countries.

The supersession of old traditions by new policies is even more marked in other territories within the British Empire. Here, out of a chaos of experiments which defy classification, there are emerging two problems requiring for their solution two different lines of policy: the education of races who, for a long time to come, cannot be expected to attain to anything like Western standards; and the education of races who are, if anything, only too capable of reaching the formal standards of Western education, but whose real needs are not likely to be satisfactorily met by those standards. The first is the problem of tropical Africa and, to some extent, of the African populations of the West Indies; the latter is the problem of India, Ceylon and Malaya and, to some extent, Palestine and the Sudan. The first problem, difficult though it is, is by far the simpler; the second seems sometimes almost to defy solution. It is summed up in the advice tendered to China by the League of Nations' Mission of Educational Experts in 1932[1]:

> "Our confidence in what the Chinese people are capable of accomplishing justifies our hope that the pride shown by the Chinese in the similarity between their institutions and those of Western countries with a modern culture of longer standing will not result in their confusing this apparent and outward similarity with true intrinsic equality. Public education in China will not attain the value of Western education until all signs of European and American influence have been eliminated, when there will be something really Chinese to compare with what is essentially American or European."

E. P.

[1] *The Reorganisation of Education in China*, League of Nations Institute of Intellectual Co-operation.

CHAPTER TWO

England and Wales

I. Governing Enactments

THE statutory provisions as to education in England and Wales are mainly contained in the consolidated Education Act, 1921. In addition, two earlier Acts must, however, be mentioned, which were not included in this consolidation : the **Welsh Intermediate Education Act, 1889,** which governs the administration of 102 secondary schools in Wales, and the **Board of Education Act, 1899,** which established the Board of Education. Under the latter Act, the Board of Education consists of the Secretaries of State, the Lord President of the Council, the First Lord of the Treasury and the Chancellor of the Exchequer, under the chairmanship of a President ; but the Board does not function and the President acts in all respects as the minister in charge of an ordinary Government department.

The Act of 1921, modified as set out in the Legal Notes (Section V of this Part, Chapter One), governs the whole system of public education in England and Wales, with the two exceptions already noticed and with the further exceptions that reformatory and industrial schools and technical education for agriculture are distinct services, being administered by the Home Office and Ministry of Agriculture respectively, and governed by the Children Acts, 1908 to 1933, and the Ministry of Agriculture and Fisheries Act, 1919. The Board of Education also exercises certain powers under the Charitable Trusts and Endowed Schools Acts, 1853–1889. The school medical service, administered by the Board, is a service delegated to the Board by the Ministry of Health, under the Ministry of Health Act, 1919 (Clause 3 (*d*)).

II. Administrative System

By Clause 1 of the Act of 1921, the Board of Education is " charged with the superintendence " of education. The actual administrators of education are the 317 local education authorities.

There are two categories of local education authorities (Clause 3), one for elementary education and one for higher education.

Elementary Education

Local education authorities for elementary education are the London County Council, the councils of the 83 county boroughs, the councils of 131 non-county boroughs and 40 urban districts, and the councils of the 62 counties for all parts of their area not

included in the area of non-county boroughs and urban districts. Under the Local Government Act of 1888, any borough attaining a population of 50,000 is entitled to become a county borough. Non-county boroughs and urban districts, whose boundaries are enlarged to embrace an area which had a population in 1921 of over 10,000 in the case of boroughs, and over 20,000 in the case of urban districts, may be created education authorities by Act of Parliament.

The only statutory limit to the sphere of an authority for elementary education is the one which it shares with all non-county boroughs and urban districts (see below under Higher Education), that it may not spend more than the annual produce of a 1*d.* rate in maintaining schools which charge a fee (Clause 37), or which normally retain their pupils beyond the age of 16 (Clause 20). Any school which does not charge a fee and does not normally retain its pupils beyond the age of 16 may be a public elementary school. A public elementary school must, indeed, be a school " at which elementary education is the principal part of the education there given " (Clause 170), but an authority for elementary education must make adequate provision in such schools for practical and advanced instruction and for preparing children for further education in schools other than elementary, and it may only retain a child up to the age of 16 in a school where such provision is made (Clauses 8, 20 and 26).

The distinguishing mark of authorities for elementary education is the fact that they are the administrators of compulsory education. It is the duty of parents to cause their children " to receive efficient elementary instruction in reading, writing and arithmetic " from the end of the school term in which they reach the age of 5 to the end of the school term in which they reach the age of 14 (Clauses 42 and 138). The upper limit may be raised to 15 by local by-law and has been so raised by Cornwall, Carnarvonshire, East Suffolk, Plymouth, Bath and Chesterfield. The lower limit may be raised to 6 by local by-law and has been so raised by Cambridgeshire. The parent " in order to provide efficient elementary instruction for his child " may, in the absence of a reasonable excuse, be forced to send the child to school, and it is the duty of a local education authority, after warning the parent, to apply to a court of summary jurisdiction for a school-attendance order in such cases (Clauses 43–46 and 49).

The duty of an authority for elementary education is " to maintain and keep efficient all public elementary schools within their area which are necessary " (Clause 17). All elementary schools now receiving aid from public funds are deemed to be necessary unless there are less than thirty scholars in average attendance or unless the Board are satisfied that accommodation is available in a school of the same type in the area of the same local authority and reasonably accessible to the children concerned (Education, Necessity of Schools, Act, 1933). The authority must also " provide for their area a sufficient amount of . . . accommodation in public

elementary schools available for all the children resident in the area . . . for whose elementary education sufficient and suitable provision is not otherwise made " (Clause 17). It is also the authority's duty to make by-laws " respecting the attendance of children at school."

Elementary schools are of two types, " provided " and " non-provided." The provided schools are those built by public authorities or subsequently taken over by them, and the non-provided those built by other persons or bodies. Each of these schools is managed by a body of managers. The managers of provided schools are, generally speaking, appointed entirely by public authorities. Those of non-provided schools are appointed in the ratio of 4 : 2 by the owners of the school, or those qualified to appoint under its trust deed, and by public authorities (Clauses 30–32 and Schedule 3). In all schools, provided and non-provided, the authority is responsible for, and has control of, all secular instruction, and the managers must carry out any directions of the local authority in such matters.

The managers of non-provided schools appoint and dismiss teachers, subject to the consent of the authority, but the consent to an appointment may not be withheld except on educational grounds, and the consent to a dismissal is not necessary if the dismissal is on the grounds of the giving of religious instruction in the school. On the other hand, the authority may give directions to the managers for the dismissal of any teacher on educational (as distinct from religious) grounds. New non-provided schools may be built unless the local education authority or any ten ratepayers raise objection, and in the event of such objection it is the duty of the Board of Education to decide whether the school is necessary or not, " having regard to the interest of secular instruction, to the wishes of parents as to the education of their children, and to the economy of the rates " (Clauses 18 and 19). The authority is responsible for the payment of the teachers and for fair wear and tear to any room, and the managers are responsible for keeping the school-house in good repair, and making such alterations and improvements as may be reasonably required by the authority (Clause 29). The managers may not close the school without giving eighteen months' notice to the authority, and during that eighteen months may be forced to place the school-house at the disposal of the local education authority, free of charge, if they are unable or unwilling to carry it on up to the end of the period.

No school, provided or non-provided, may impose any religious test as a condition of entry into, or membership of, the school, and must not give religious instruction or hold religious observances at any other time than at the beginning and the end of the school meeting, each session of the school, morning and afternoon, being a meeting (Clause 27). In a provided school " no religious catechism or religious formulary which is distinctive of any particular denomination shall be taught in the school " (Clause 28).

All public elementary schools must be open to inspection by His Majesty's Inspectors and must be conducted in accordance with the Board's regulations (Clause 27), and none of them may charge a fee of any kind. The prohibition of fees does not, however, apply to schools for blind, deaf and epileptic children (Clause 37). An authority for elementary education is free to provide nursery schools (Clause 21) and vacation schools (Clause 22) as it desires.

Higher Education

Local education authorities for higher education are the London County Council, the councils of the 83 county boroughs and the councils of the 62 counties. A borough or urban district, however, whether or not it is an education authority, may aid higher education to an extent not exceeding the annual produce of a rate of 1*d.* in the £ (Clause 70).

There is no statutory limit to the sphere of an authority for higher education, and there is no statutory age below which a child may not be regarded as receiving higher education. The only duty of an authority for higher education is to " consider the educational needs of their area and take such steps as seem to them desirable, after consultation with the Board of Education, to supply or aid the supply of higher education " (Clause 70), and to provide " for the progressive development and comprehensive organisation of education in respect of their area " (Clause 11).

In regard to religious teaching, the only limits on its discretion are that it may not make rules for religious instruction or worship in schools aided but not provided by it, that it may not discriminate between pupils in its provided schools on grounds of religious belief, and that in its provided schools it may not itself pay for denominational religious instruction, though it may allow such instruction to be given at the request of parents.

Clauses 75–79 of the Act of 1921 lay on local authorities for higher education the duty of providing, as from an appointed day, a system of part-time day continuation schools. These clauses are in force only in one area—the Rugby district of the county of Warwickshire.

Schemes and Programmes

Clauses 11–16 of the Act of 1921 empower the Board to require local authorities to submit " schemes showing the mode in which their duties and powers . . . are to be performed and exercised." When such schemes have been approved by the Board, it becomes " the duty of the local education authority to give effect to the scheme." These clauses have never been put into force. Instead, since 1925, local authorities have been called on to submit three-year programmes to the Board, but the Board's approval of these programmes, while it indicates that the Board is prepared to pay grant on the work involved, does not create any specific duty which the local authorities are bound to discharge.

Parliamentary Grants

Under the Act of 1921 it was the duty of the Board of Education to provide by regulations for the payment to local education authorities of a Parliamentary grant at a rate of not less than one-half of the annual expenditure of the authority, recognised by the Board of Education as expenditure in aid of which Parliamentary grants should be made (Clause 118). This clause has been suspended by Order in Council under the Economy Act of 1931, so far as it requires the Board to pay grant at the minimum rate of 50 per cent. The power of recognition or non-recognition of expenditure is the Board's main weapon of control over educational policy.

The Board's Grant Regulations

The Board's control over educational policy is mainly exercised under the " Code of Regulations for Public Elementary Schools," and the Regulations for Secondary Schools, for Further Education (a colourless title adopted to describe the varieties of education miscalled technical), for the Training of Teachers and for Adult Education.

Public Elementary Schools being defined by statute, the Code contains no definition. A secondary school is defined as " a school for pupils who intend to remain for at least four years or up to at least the age of 16. It must provide a progressive course of general education of a kind and amount suited to an age range at least from 12–17," and " the number of pupils taught together at one time must not, without the concurrence of the Board, exceed thirty, and must never exceed thirty-five." Further, a secondary school is defined by its curriculum, which, " except with the previous permission of the Board," must include " English language and literature, at least one language other than English, geography, history, mathematics, science, drawing, manual instruction in the case of boys, domestic subjects in the case of girls, physical training and organised games." A school of further education is defined as a school which belongs to one of seven types : part-time day continuation schools, evening institutes, full-time junior technical schools and junior housewifery schools, and full-time or part-time technical day classes, art schools and colleges for further education. The scope of each of these types is roughly defined by curriculum and age range. The regulations for the training of teachers apply to institutions " established for the provision of full-time courses for persons preparing to become teachers " and to " the preliminary education of candidates for the (teaching) profession as student teachers, pupil teachers or otherwise . . . for whose education provision cannot be made at a secondary school up to the age of 18." The adult education regulations apply to courses of instruction " designed for the liberal education of adults, i.e. persons of at least 18 years of age."

Except for this purpose of administrative classification, none of the regulations lays down any specific requirements as to curriculum. The only regulation on the subject for elementary schools is that " the secular instruction . . . must be in accordance with a suitable curriculum and syllabus framed with due regard to the organisation and circumstances of the school concerned." The only regulation for training colleges is that " the courses of education and professional training must be in accordance with a suitable curriculum, and must include a systematic study of the principles and practice of teaching."

No examinations are prescribed for elementary schools except that " candidates for admission " into secondary schools " must pass an entrance test suitable to their age, and designed to ascertain their fitness to profit by the instruction." The recognised first and second examinations in secondary schools are administered, not by the department, but by regional boards representing mainly the universities, and the department confines itself to protecting secondary schools from the intrusion of other external examinations below the stage of the approved first examination (Section 8 of the Secondary Regulations). Training-college examinations have also now been handed over to bodies representing the training colleges and the universities.

On the other hand, the Elementary Code, though not the other regulations, contains elaborate provisions as to the qualifications required of teachers, the most important of which is the Board's certificate awarded on the results of the final training-college examination. This control over the qualifications of teachers constitutes one of the main distinctions between elementary and higher education.

As regards the material conditions of the schools the general wording of the Board's elementary regulations gives the department wide powers of control. Under this wording " the premises of a school . . . must be sufficient, convenient and healthy . . . the number of children ordinarily attending . . . must not exceed the recognised accommodation, and classrooms must not be overcrowded. Recognised accommodation may be revised from time to time by the Board." Moreover the grant system by which grant is automatically payable on " recognised " expenditure by local authorities obliges the Board to prescribe in all its regulations that " new premises or enlargements or alterations of existing premises and plans thereof must be approved (by the Board) unless the Board otherwise direct."

The Board's Organisation

The Board's administrative staff, provided for in the Estimates for 1933–4, numbers 931 (as against 1,402 in 1924), and the inspectorate (other than medical) 335. The administrative staff and inspectorate for England are organised in nine territorial divisions, dealing with all kinds of education in a given area. These divisions are controlled by three assistant secretaries, and three chief inspectors for elementary, secondary and technical education respectively, one of whom is senior chief inspector, and one chief woman inspector.

The Welsh Department of the Board is a separate department with its own permanent secretary, its own chief inspector and its own inspectorate, numbering 27 (included in the preceding figure). It has charge of all Welsh education. The Medical Department is under the control of a chief medical officer, who is also Chief Medical Officer to the Ministry of Health, and its staff consists of seven medical officers and fourteen inspectors of physical exercises.

Advisory Committees

The only Statutory Advisory Committee is the Consultative Committee, constituted under Clause 2 of the Act of 1921, two-thirds of whose members must be " persons qualified to represent the views of universities and other bodies interested in education." This body is a kind of standing departmental committee, reporting

on matters referred to it by the Board. There are also non-statutory advisory committees on Adult Education and on Juvenile Organisations ; a Secondary Examinations Council whose function is to co-ordinate the work of the regional boards controlling the first and second examinations in secondary schools ; and a Central Advisory Committee for the Certification of Teachers.

Museums and Art

The Board of Education is responsible for the Victoria and Albert and Science Museums and the Royal College of Art. The Royal College of Art is the only educational institution directly administered by the Board, though its actual administration is mainly left to its Principal. The Imperial College of Science and Technology, which was once directly administered by the Board, is now a constituent school of the University of London, but the Board still grant certain Royal Scholarships annually to students.

The Local Authorities

In all cases the council is the local education authority, but, under Clause 4 of the Act of 1921, every Council *must* refer all matters related to the exercise of its education powers to an Education Committee, except the power of raising a rate or borrowing money, and must receive and consider the report of the Committee before exercising its powers in any such matter, except in case of urgency. Further, it *may* delegate to the Committee any of its powers except the power of raising a rate or borrowing money. This statutory Education Committee must be constituted in accordance with a scheme approved by the Board of Education. The majority of its members must be members of the Council ; co-opted members may be appointed who should consist of persons of experience in education, or persons acquainted with the needs of the various kinds of schools in the area ; and women as well as men must be included among the members of the Committee.

Section 6 (1) of the Education Act gives authority to a Council having powers under the Education Acts to enter into arrangements for co-operation or combination with any other council having such powers for the purpose of performing any duty or exercising any power under the Education Acts, other than the raising of a rate or the borrowing of money, as well as for the proportion of contribution to be paid by each council. Further, by Section 6 (2) the Board of Education may, on the application of two or more councils having powers under the Education Acts, by scheme provide for the establishment of a federation for such purposes relating to matters of common interest concerning education which it is necessary or convenient to consider in relation to areas larger than those of individual education areas, but this provision of the Act has not been utilised.

III. The School System

The outlines of the school system in England and Wales are set out statistically in the tables annexed to this chapter. What follows may be read as a commentary on Table 1 (pages 42–3).

Public Elementary Schools

The ground-floor of the school structure is a system of public elementary education which is now in process of reorganisation. The All-age Departments represent an old type of school for pupils of all ages from 7 to 14, or (where there was no separate Infants' Department) from 5 to 14. For this type is steadily being substituted a Junior Department from 7 to 11 (or, where there is no separate Infants' Department, from 5 to 11) and a Senior Department from 11 to 14 or 15. The old Poor Law Schools are being gradually absorbed into the new system. The progress of this reorganisation is indicated by the following figures:

Number of Pupils on March 31st in	1930	1931	1932
Infants' Departments . . .	1,253,483	1,200,923	1,180,273
Junior Departments . . .	668,000	844,291	1,041,915
All-age Departments . . .	3,366,896	3,143,370	2,823,483[1]
Senior Departments . . .	240,743	326,217	530,017
Poor Law Schools	9,525	7,252	7,240
Total	5,538,647	5,522,053	5,582,928

The Board of Education has estimated that, including children in all-age schools with senior divisions, between 40 and 50 per cent. of the pupils over 11 were in reorganised schools in December 1932.

Infants' Departments and Nursery Schools

The separation of infants' departments from the rest of the elementary schools is a strongly held tradition in England and Wales. There were 6,404 separate infants' departments on March 31st, 1932. Hitherto, what in other countries would be called "pre-school" education has been mainly conducted in these departments, which on March 31st, 1932, contained just over 120,000 children of 3–5 years of age. The Board of Education does not recognise children under 3 years of age for capitation grant; but local authorities are otherwise free to take children into their schools at any age. Since the war a beginning has been made with the public provision of special nursery schools, but the total number of nursery schools recognised by the Board of Education on March

[1] Of these about 172,000 children under 11 and about 162,000 over 11 were in schools providing a separately organised course of instruction for all children over 11.

31st, 1933, was still only 58, with accommodation for about 4,750 children.

The " Break at Eleven " and the " Ladder "

The Senior Department is a generic title covering various types of school, selective and non-selective, variously known as senior, central, modern or intermediate schools, and variously organised according as they aim at retaining their pupils up to 16, or 15, or merely up to the age of 14 plus. Moreover, under the reorganisation scheme these senior departments are to be regarded as co-ordinate with the grant-aided secondary schools, the normal age of entry into which is from 11½ to 12½, and with the smaller class of junior technical schools, the normal age of entry into which is rather later, usually 13.

It is, however, unfortunately impossible to give any clear statistical picture of the " ladder " reaching from the junior school to the various types of post-primary education, partly because the reorganisation of elementary schools is still proceeding, partly because nearly one-quarter of the annual entry into secondary schools (21,437 in 1930–1 out of a total entry of 89,862) comes, not from the public elementary schools but from private schools or private homes, and partly because the age of entry into secondary schools varies, even in the case of public elementary school entrants, from under 9 to over 14 years of age. In 1930–1 just under 50 per cent. of such entrants entered after reaching the age of 11 and before reaching the age of 12, and just over 20 per cent. after reaching the age of 12 and before reaching the age of 13, while 20 per cent. entered before reaching the age of 11. While, therefore, the Board of Education in their statistics express the entry from public elementary into secondary schools in a year ending on July 31st as a percentage of the number of public elementary school pupils aged 10 and under 11 on March 31st of the previous year, the entry in that year will only be partly drawn from this age group.

Subject, however, to these qualifications, the following figures may give a fairly accurate idea of the " ladder." On March 31st, 1928, there were 477,828 pupils in public elementary schools (other than poor law schools) aged 10 and under 11. At the same date there were 10,389 pupils of the same age in grant-aided secondary schools, a number of whom (which may be estimated at from one-quarter to one-third) had previously been in public elementary schools. Of the 477,828, about 4,800 were in schools for physically or mentally defective children. Of the remainder, probably 11 per cent. subsequently gained admission to grant-aided secondary schools. Just over 5,900 entered junior technical or art schools, 1,900 at 12–13, and 4,000 at 13–14. Of the remainder 71,117 entered senior departments before they reached the age of 13, and 27,297 at 13–14. There remained rather fewer than 309,000 who, on March 31st, 1931, were still being taught in all-age departments (including 122 who were still in junior departments).

On March 31st, 1928, however, there were also some 40,000 children aged 10–11 who were not being educated in any school maintained or aided by public authorities. (It will be noted that this figure, about 7 per cent. of the total population of that age, is lower than is often supposed. The total number of children 6–14 receiving home or private school education probably does not exceed 350,000.) Admissions to grant-aided secondary schools of pupils not coming from public elementary schools have in recent years remained fairly steady at between 6,500 and 7,000 pupils a year between the ages of 11 and under 14, and from 1,800 to 2,200 at 14 years of age and over. Probably, therefore, about 22 per cent. of these children had entered grant-aided secondary schools by March 31st, 1932, most of the remainder entering one of the private schools listed in Table 9. The total entry of this age group into grant-aided secondary schools, including those already there between 10 and 11, would therefore be about 72,000, or approximately 14 per cent.

The Beginnings of the Technical "Ladder"

Before proceeding to discuss the nature of the schools in the post-primary or secondary stage of the ladder, we must follow our story of the 1928 10–11 age group in another direction. At 14–15 the great majority of this group whom we have seen remaining in the public elementary schools up to the age of 14—between 400,000 and 410,000—began to pass out of full-time education. On March 31st, 1932, only 116,734 of them remained in public elementary schools, 47,923 of them in senior departments. Of these about 35,000 were staying on voluntarily after attaining the age of exemption, about 20,000 of them in senior departments. A small number entered upon a new course of full-time education. A few entered junior technical or art schools at 14 (probably nearly 2,000). A still smaller number (about 1,200) entered technical or art schools as full-time pupils. Of the remainder a very substantial proportion, about 97,000, entered upon some form of part-time education.

Most of these, about 83,650, were attending evening classes. All but about 2,800 of these were attending evening institutes of the type described in the YEAR BOOK for 1932, pages 294–302, the remainder attending evening classes in technical schools or colleges (see *ibid.*, pages 311–25). But about 7,300 were attending one of the fifty-seven day continuation schools, i.e. "schools providing a general education, with or without vocational domestic or art instruction, in part-time courses between 8 a.m. and 6 p.m. for students from exemption age to the age of 18." All but seven of these schools are controlled by local authorities, but some of those so controlled, as well as some of the others, are "works" schools, provided by, or managed in conjunction with, employers. A small number, only about 750, were attending technical day classes, this figure indicating the very slow growth, at this age at any rate,

of part-time day education in England and Wales. Finally, a somewhat larger number, about 5,300, were attending part-time courses at art schools, most if not all of these being day courses.

The Future Width of the "Ladder"

The age group whose fortunes we have thus followed up to about the age of 15 is in one sense not a typical group, since it represents the low birth-rate year of 1917–18. The total 10–11 age group in 1931 was nearly 200,000, or more than 35 per cent., larger; in the public elementary schools it was nearly 250,000, or about 50 per cent., larger; and the chances of that age group will therefore be correspondingly limited, in spite of the growth of secondary school provision in the interval. The annual entry into secondary schools from public elementary schools has grown from 53,055 in 1928–9 to 75,181 in 1931–2, but the latter figure only represents 10·5 per cent. of the 1931 10–11 age group. Nevertheless, in another sense, the age group we have taken is the more typical, for it is almost identical with the age group which we may expect in the future. According to the Government Actuary's estimates published by the Board of Education in Circular 1426 the 10–11 age group in public elementary schools in 1942 will not exceed about 494,000. This will be the size of the same age group in future years if the annual number of births becomes stabilised at 625,000; but if the number of births falls to 600,000, the size of the age group in public elementary schools will fall to about 476,000, and an annual entry of 75,000 from public elementary schools into secondary schools will represent about 15¾ per cent. of such an age group. On the whole, therefore, the existing school system of the country is likely to offer a wider ladder to its child population in the near future than it offered to those born in the last year of the war.

The Break at Eleven: Examinations and Exemption from Fees

The passage of the public elementary school pupil to the post-primary stage of education is connected with, and for some is governed by, an examination. This examination was originally held solely for the purpose of admitting candidates to secondary schools. As such, it served a double purpose: as an entrance examination, and as a test for the grant of a "free place." Grant-aided secondary schools charge fees, the rates of which are as follows:

	1932
Schools charging no Tuition Fee	79
Tuition Fee not exceeding 3 gns. per annum	8
" " over 3 but not exceeding 6	152
" " " 6 " " 9	282
" " " 9 " " 12	549
" " " 12 " " 15	148
" " " 15 " " 20	79
" " " 20	86

From 1907 to 1932 the regulations of the Board of Education required that every grant-aided secondary school should each year award " free places " to a number of entrants into the school, equal to at least 25 per cent. of the total admissions in the previous year. Some schools were allowed to award a lower percentage, usually 10 per cent. Under the same regulations, schools might not award a higher percentage than 50 per cent., without the permission of the Board. The minimum of 25 per cent. was reserved for pupils from the public elementary schools. Certain local education authorities, such as Manchester and Bradford, have adopted the principle of free secondary education in schools maintained by them ; and others, like Birmingham, have reached nearly the same result by large remissions of fees, according to the needs of parents. Table 12 shows the proportion in 1932 between free places and fee-paying pupils. In 1932 the Board of Education modified this system. " Free places " were renamed " special places." The number was not reduced, but the winning of such a place will not, in future, entitle the scholar to exemption from fees if the parents' means are sufficient to enable them to pay.

So far as free or special places are concerned, the examination was always intended to be competitive, those highest on the list of marks securing such places. So far as *admission* to the secondary school is concerned, however, the examination was originally intended to be a qualifying one. It is, however, in fact, severely competitive. The examination is conducted by each local education authority, and varies considerably in character in different areas. In a number, there are two examinations : one for free or special places, and one for fee-paying pupils. Where there is only a single examination, after the candidates highest in the list have been awarded free or special places, the remaining fee-paying places available are awarded to the candidates next highest on the list, but it commonly happens that a number of these are unable to take advantage of the award, owing to inability to pay fees. The final awards are therefore by no means necessarily given to the ablest candidates. In most areas, the free or special place awards made on this examination, coupled, where necessary, with travelling or maintenance allowances, are given the name of " minor " or " junior scholarships."

As the reorganisation of post-primary education has proceeded, local authorities have used the same examination to select candidates for selective senior schools, and also, in some cases, for junior technical schools. The candidates who just fail to secure a free place in a secondary school, and cannot afford to pay fees, tend to gravitate to the selective senior school. The junior technical school is, like the secondary school, a fee-paying school. The fees range generally from 10*s*. to £2 2*s*. a term.

Further, there has been a tendency to make the examination a general one for all pupils in public elementary schools. As such,

it assists in the classification of children passing into non-selective senior schools.

The subjects of the examination are usually confined, so far as the written examination is concerned, to English and arithmetic, and the Board of Education discountenances the inclusion of written tests in other subjects. A few authorities, however, set papers in history and geography, and some set a separate paper in English Composition. The reliability of this examination for its original purpose, as a test of fitness for the curriculum of the secondary school, has been forcibly questioned in recent years.

Post-primary Education : Senior Schools

We shall not attempt to summarise the experiments now being made in the organisation of selective and non-selective senior schools. A critical account of these experiments may be found on pages 189–207 of the YEAR BOOK for 1933. The general idea of the distinction between senior schools, junior technical schools and secondary schools is that the first should give a general education to pupils who will leave school not later than the age of 15, that the second should offer the same type of education with the addition of some distinct commercial or industrial bias, and the third should be orientated towards the universities and towards professional or commercial employments. These distinctions are not, however, invariably observed in practice. The central schools of London are, for instance, very distinctly orientated towards commercial occupations and, so far as that is concerned, perform much the same function as the secondary schools. The central schools of Manchester and the intermediate schools of Sheffield prepare their pupils for the School Certificate examination which, as we shall see, is the standard first examination in secondary schools ; and they perform this function as effectively as the secondary schools themselves. Such schools are, in fact, only distinguished from secondary schools by the facts that they cannot normally carry their pupils beyond the age of 16, that they charge no fees, and that the basic rates of pay of their teachers are governed by the elementary and not by the secondary scales. Most senior schools, on the other hand, carry few or none of their pupils beyond the age of exemption. The common characteristic of all such schools is that they make special provision for practical instruction in handicrafts and the like (see Table 6), and there is an increasing tendency for all of them to experiment with the teaching of one modern language.

There is no general leaving examination for senior schools, and hitherto the Board of Education has discouraged any attempt to institute one. This attitude has been supported by a Committee representing the Association of Education Committees and the National Union of Teachers which reported in 1928.

Junior Technical Schools and Junior Art Departments

Table 17 shows the distribution of the pupils in junior full-time technical and art schools, as between junior technical schools, junior commercial schools, junior art departments and junior housewifery schools. These institutions are fully described on pages 285–93 in the YEAR BOOK for 1932. It is only necessary to emphasise here that, outside London, the junior technical school is generally a pre-apprenticeship school, but in London a number of them take the form of " trade schools," giving what is, in fact, part of an apprenticeship training. This applies also in part to junior art departments. There is no leaving examination in any of these schools.

The Secondary School System

Table 9 contains a general summary of all types of secondary school, grant-aided and independent.[1]

The grant-aided schools fall into two categories: schools provided and maintained by the local education authorities themselves, and schools provided by voluntary effort, but receiving a grant from the Board of Education or the local education authority, and having representatives of the grant-giving authority on their governing bodies. The Welsh Intermediate Schools have a somewhat different history, dating from an Act of 1889 which inaugurated a public secondary school system in Wales thirteen years before one was organised in England, and established a special authority, the Central Welsh Board, for purposes of inspection and examination. These schools are described on pages 202–7 of the YEAR BOOK for 1932; but for the purposes of this summary they may be regarded as, to all intents and purposes, schools provided and maintained by local education authorities.

The independent schools fall into four main classes: boys' public schools, boys' preparatory schools, other boys' schools (some of them mixed schools) and girls' schools. The boys' public school is, generally speaking, a school which educates boys for the five years 13–18, and whose headmaster is a member of the " Headmasters' Conference." It admits its pupils at 13 through the Common Entrance Examination, the obligatory subjects for which are scripture and English, history, geography, elementary mathematics, Latin and French. The boys' preparatory school is a school whose purpose is to prepare boys for a full course of secondary education in another school, generally one of the public schools. The other independent boys' schools, while partly acting as preparatory schools, commonly parallel the preparatory and public schools through the whole of their course; that is to say, they take boys at 9 or 10 or younger and are prepared to educate them up

[1] For a list of independent public schools, see pages 175–7 of the YEAR BOOK for 1932. To that list should be added Dauntsey School, Wiltshire, founded 1543.

to 16 or beyond. The independent boys' schools, and also the girls' schools, can be further classified according as to whether they submit voluntarily to inspection by the Board of Education and are " recognised as efficient " by the Board.

It is difficult to draw any clear educational distinction between the independent boys' public schools and the grant-aided secondary schools for boys. The Headmasters' Conference was founded in 1869 and represented 34 schools in the following year. It was incorporated in 1909 and now represents 177 schools, 40 of which are outside England and Wales. Of the remainder, 59 are grant-aided schools, and one, the Royal Naval College at Dartmouth, is entirely managed by the State. Many of the best-known non-grant-aided public schools have the same history as the great majority of the grant-aided secondary schools, i.e. they are the survivors of the old endowed grammar schools or the more modern endowed schools founded during the nineteenth century. Nevertheless, the " free place " obligation imposed on grant-aided schools does tend to convert them increasingly into local schools, while completely independent schools tend, on the contrary, increasingly to become non-local. Moreover, the free-place obligation has the definite effect that a number of their students enter at the age of 11 plus instead of, as usual in public schools, at 13 plus. Another feature which perhaps distinguishes the public school more clearly from the grant-aided secondary school is that the majority of their students, coming to the school a year or two later than to the day secondary school, stay at the school for a year or two longer, until about the age of 18.

It is also difficult to generalise about the fees charged in public schools. They range from the £10 a year paid by 90 foundation scholars at Wellington, who are sons of deceased officers of the army, and the £31 10*s*. a year paid by 70 scholars at Winchester, to the £230 paid by the majority of boys at Eton. There is usually an entrance fee, which is generally about 5 guineas, but is lower in some cases and rises in Eton and Harrow to £21. Besides foundation scholarships and lower fees in some cases to the sons of army officers, civil servants, or clergy, or to boys from the locality with which the school was originally identified, there are also in most schools a number of additional scholarships and exhibitions, and in some cases discretionary assistance is given from school funds to boys of poor parents. There are also a large number of leaving scholarships, often attached to particular colleges at Oxford and Cambridge. The average fee is probably in the neighbourhood of £175 a year. The average fee in preparatory schools which are members of the Preparatory Schools Association is probably about £120 a year.

If it is difficult to draw a coherent educational line between the independent boys' public schools and the grant-aided secondary schools for boys, it is even more difficult to draw any such line between the independent and the grant-aided girls' schools.

Grant-aided Secondary Schools

The body of secondary school students is, as already pointed out, a mixed one. On March 31st, 1932, 73·1 per cent. had come from public elementary schools and 26·9 per cent. from elsewhere. Some of the former and a considerable number of the latter had entered the junior department of the school before the age of 10. Free places are held mainly by the ex-public elementary school pupils, less than 3 per cent. of the free places on March 31st, 1932, being held by other pupils. It is important to note that the provision of free places has fairly well equalised the educational opportunities of ex-public elementary school pupils and other pupils who may be presumed to be in somewhat better circumstances. Thus, during the year ending July 31st, 1931, 76 per cent. of the pupils admitted to grant-aided secondary schools came from public elementary schools and in the same year 64·3 per cent. of the pupils proceeding from grant-aided secondary schools to the universities had also come from these schools. That this is due to the provision of free places is indicated by the fact that, in the same year, 63 per cent. of the ex-public elementary school pupils admitted to secondary schools were free placers, and free placers accounted for 78 per cent. of the admission of ex-public elementary school pupils to universities. Indeed, there is considerable truth in the view that, in present economic circumstances, the ex-public elementary school pupil has a better chance of a university education than the child of a professional man whose circumstances are not sufficiently comfortable to enable him to afford a boarding-school education for his children.

The curriculum of secondary schools is fully dealt with on pages 383–517 of this volume, and it is unnecessary to do more here than give a rough idea of the probable general progress through the secondary school of the 1928 age group whose fortunes we have studied up to this point. Of the approximately 72,000 members of this age group whom we have seen entering the secondary school, 64,310 were still there on March 31st, 1932. A number of these will leave before the age of 16, many of them before sitting for the school certificate examination; but, judging from the past, about 50,000 will sit for that examination, and about 36,000 will pass. For the majority of the 50,000, the examination will mark the end of their secondary school life, but rather more than 20,000 will stay on beyond the age of 17, and rather more than 9,000 beyond the age of 18. These will be, for the most part, taking "advanced courses"; rather more than 9,000 will sit for the Higher Certificate examination, and rather less than 70 per cent. will pass it. Finally, about 5,600 will proceed to two-year training colleges for teachers, about 1,600 to universities to follow a four-year course of training for the same purpose, under the supervision of a university training department, and about 2,500 will proceed to the ordinary courses at a university. At the same time, of the rather more than 30,000 members of the same age group who neither attended public

elementary schools nor entered the grant-aided secondary schools, rather more than 6,000 will enter the universities, a great majority of them through the independent schools.

In all such calculations it should be remembered that we are dealing with an average of the country as a whole. The provision of secondary education and the length of secondary school life vary very greatly from area to area.

Secondary School Examinations

It will be observed from this account of secondary school life that (and this applies to the independent school almost as much as to the grant-aided school) the education of the secondary school pupil is largely governed by two examinations. These were instituted by the Board of Education after the war for the purpose of setting a reasonable standard of secondary school work, and are commonly known as the First and Second School examinations, or as the School Certificate and the Higher Certificate examinations. They are conducted by eight examining bodies which are all university delegacies. They are: the Oxford and Cambridge Board, the Oxford Local Examinations Delegacy, the Cambridge Local Examinations Syndicate, the Northern Universities Joint Matriculation Board (comprising the Universities of Birmingham, Leeds, Liverpool, Manchester and Sheffield), the Boards of London, Durham and Bristol, and the Central Welsh Board (which, though not a university body, contains representatives of the University of Wales). The examinations conducted by these bodies are controlled and standardised by the Secondary Schools Examinations Council of the Board of Education, and they are, under the requisite conditions, interchangeable.

The examinations conducted by these eight bodies vary somewhat, but the following description will give a general idea of their character.

The School Certificate

The School Certificate examination is designed to be taken at about the age of 16. Candidates must pass in five subjects. The subjects are arranged in four groups. The groups are generally:

1. English, Geography, Ancient and Modern History, Religious Knowledge.
2. French, German, Greek, Latin, or other approved language.
3. Biology, Botany, Chemistry, General Elementary Science (sometimes called Physics-with-Chemistry), Geology, Mathematics, Mechanics, Physics.
4. Art, Domestic Subjects, Handicraft, Music.

Candidates must pass in each of the first three groups, and English is generally compulsory. " Credits " are given in each subject to candidates whose papers are sufficiently above the pass standard.

This examination has been adopted by the universities as a

matriculation examination, but the universities differ in the number and distribution of credits which they require for matriculation purposes. This use of the examination has been strongly criticised, both by the Secondary Schools Examinations Council and by many of the universities themselves. The Council recommended in 1932 that the examination " should no longer be accepted by the universities as alternative to their own matriculation examinations."

The Higher Certificate

The Higher Certificate examination is designed to set a standard for education in the last two years of secondary school life. It was instituted to discourage an undue degree of specialisation, though critics may question whether it has been successful in that respect. The Cambridge examinations for 1932 may be taken as an example. Again, the subjects in the examination are divided into four groups :

1. Classics, i.e. Latin and Greek prose composition, Latin and Greek unprepared translation, Latin and Greek prepared books, Greek and Roman history, Latin and Greek grammar and literature.
2. Latin, Modern Languages, English Literature, History, Geography, Music, and Art.
3. Advanced Mathematics.
4. Natural Sciences and Mathematics.

In addition, a number of papers are set in subsidiary subjects, i.e. Latin, Greek, Greek History, Roman History, French, German, Russian, Italian, English Literature, History, Mathematics, Physics, Chemistry, Botany, the Geography of France and Germany, Religious Knowledge, Music, and Art. A candidate must pass in three subjects and in the English Essay. Group 1 counts as three subjects, group 3 as two subjects, but the English Essay does not count as a subject. A candidate offering Group 3 only, or two subjects only in Group 2 or Group 4, must satisfy the examiners in a third subject. This may be either (*a*) a further complete group subject, or (*b*) a paper or papers within one such subject, or (*c*) a subsidiary subject.

Senior Technical Education

We have carried our survey of the secondary " ladder " up to the threshold of the university. Before considering the universities and other institutions which would, in other countries, be recognised as coming under the head of " Higher Education," we have to complete our survey of the technical " ladder " which we have not yet carried beyond the age of about 15.

English and Welsh technical education cannot, unfortunately, be considered as a " ladder." The survey of that kind of education contained on pages 285–356 of the YEAR BOOK for 1932 and the critical comparison of it with corresponding systems in foreign countries on pages 111–47 of the YEAR BOOK for 1933 indicate its

miscellaneous character. It is predominantly a system of evening education, and the extent to which such evening education can be regarded as directly vocational in character was discussed on pages 30 and 31 of the YEAR BOOK for 1933. Between the ages of 15 and 18, these evening classes undoubtedly include a number of very real vocational " ladders "—notably, for instance, the system of mining education, regulated by examinations controlled by the State, which is entirely a system of evening education. These " ladders " cannot, however, be statistically detached from the surrounding mass of individual work undertaken by the student in his own time according to his own estimate of the knowledge which will be useful to him in after-life. Moreover, the " ladders " themselves vary almost infinitely in character and length.

It is, consequently, a temptation to concentrate attention on the figures for part-time day classes and senior full-time courses as representing the real " ladder " in technical education. It is, however, necessary to resist this temptation. These classes and courses do, indeed, represent the only definitely identifiable " ladder " in Table 1. They also represent what is the main aim of reformers in technical education : namely, the substitution of day for evening courses. Further, they cover most of the courses followed by candidates (5,474 in 1932) for the Ordinary and Higher National Certificate examinations conducted by institutions of technical education in collaboration with the professional associations concerned, with the approval of the Board of Education. It remains true, however, that the great majority of industrial workers who are making their way upwards in their vocations are doing so through evening courses.

Beyond the age of 18, it is even more difficult to " rationalise " technical education. There is no institution which can be picked out as belonging as a whole to the grade of higher education, except institutions which either, like the Imperial College of Science and Technology, are wholly university schools, or which, like the Manchester College of Technology, include a university department of technology. On the other hand, a number of institutions contain classes which would, in any other country, be classed as belonging to the grade of higher education. To increase the confusion, a good deal of the education given in part-time evening classes to persons aged 21 and over belongs rather to the sphere of adult education, as, for instance, the large block of over 24,000 part-time students of these ages in art schools.

It is important, however, not to exaggerate the incoherence of technical education in England and Wales. A system of education only a small portion of which can be expressed in terms of a national scheme or graduated in clearly defined grades, may none the less be easily understood in the locality served by a particular school or college and by the industries in that locality. The system certainly needs to be better planned, but its present efficiency for practical purposes should not be underrated.

One particular point in regard to which better planning is urgently necessary is in the provision made in the system of technical education for students leaving secondary schools at the age of 16 or 17. The fact that it is impossible to show statistically what this entry is indicates that technical education is not fulfilling the function which it fulfils in other countries of offering a definite prospect of continued education to ex-secondary school pupils. The connection between secondary schools and technical institutions has been of the vaguest and most tentative kind; though there are signs of improvement in this respect—in particular the fact that some 40 per cent. of the candidates for National Certificates are ex-secondary school students. The School Certificate examination is, indeed, recognised by a large number of professional organisations as exempting holders of the certificate from preliminary professional examinations, but each professional organisation is a law to itself in this matter, and its requirements cannot be brought under any general rule.

Higher Education other than Technical

Higher education does not lend itself to a short summary, and little can usefully be added to the information contained in the statistical tables.

The figures already given will indicate the large part played by institutions for the training of teachers in the provision of higher education for students staying at secondary schools beyond the age of 17. The figures already given do not, indeed, include the whole entry of ex-secondary school pupils into such institutions, for, in addition to the 7,200 already mentioned, another 1,000 or so enter two-year training colleges after having been recognised as uncertificated teachers, and practically all of these are students who have left the secondary school after obtaining the School Certificate. As will be seen from Table 19, most of the institutions concerned fall into two main categories: training departments of universities and university colleges, and two-year training colleges. It will be seen that the majority of the latter are privately provided institutions. Of these, 12 are non-denominational, 29 Church of England, 8 Roman Catholic and 2 Wesleyan. The work of these institutions was described on pages 453–63 of the YEAR BOOK for 1932. The university four-year courses are, in effect, the ordinary three-year degree course followed by a year of post-graduate pedagogical training.

For Universities, Table 21 analyses the composition of the student body summarised in Table 1. A description of the structure of the university system was given on pages 391–416 in the YEAR BOOK for 1932.

Adult education falls to be considered under this same head, but here again the reader must be referred to the description of the existing system on pages 464–478 of the YEAR BOOK for 1932.

Aid to Students

An important point in relation to higher education is the degree of financial assistance available to students in the form of scholarships or otherwise. Information on this point is given in the chapter on finance in England and Wales in this volume (see pages 184–98). It will be seen from these pages that the assistance thus available to students at universities and training colleges is as follows: from university funds, £265,000; from the Board of Education, £223,425; from local authorities, £497,000; total, £985,425. This does not include scholarships granted under a number of private benefactions, and it seems safe to say that the total annual sum considerably exceeds £1,000,000. A large proportion of the public funds thus expended are directed to the subsidisation of intending teachers, and it may be doubted whether these funds would not be put to better use if these special subsidies were absorbed into the general scholarship system. Probably about 50 per cent. of all students at universities now receive financial assistance from one or other of these sources, and many students hold two or more scholarships concurrently, subject to an overriding maximum regulated by agreement between the Board of Education, local authorities and the universities. In the academic year 1928–9 the percentage of full-time students at all universities in England and Wales who were in receipt of financial assistance was 42·7 (14,257 out of 33,352). At Oxford and Cambridge the percentage was 38·2, at London University (excluding the Medical Schools) 34, at London University Medical Schools 11·2, at the Provincial Universities and University Colleges 54, and in the University of Wales 67·3.

E. P.

TABLE 1

SURVEY BY INSTITUTION, SEX, AGE AND NUMBER OF PUPILS FOR ENGLAND AND WALES, 1932

AGE RANGE	POPULATION ESTIMATED MARCH 31ST, 1932	PUBLIC ELEMENTARY SCHOOLS											POOR LAW SCHOOL		
		INFANTS [1] [2]		JUNIOR DEPTS.		ALL AGE DEPTS.		SENIOR DEPTS.		GRAND TOTAL					
	MALE AND FEMALE	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL
3 – 4	593,000	13,404	12,818	1,362	1,358	1,883	1,795	—	—	16,649	15,971	32,620	85	72	157
4 – 5	596,000	49,015	45,674	6,034	5,694	9,316	8,442	—	—	64,365	59,810	124,175	173	145	318
5 – 6	615,000	174,644	168,512	35,381	34,610	44,367	42,331	—	—	254,392	245,453	499,845	269	208	477
6 – 7	632,000	196,564	190,585	42,086	41,140	56,251	54,421	—	—	294,901	286,246	581,147	285	219	504
7 – 8	644,000	137,677	133,238	66,625	65,515	95,315	92,441	1	—	299,618	291,194	590,812	315	208	523
8 – 9	658,000	28,850	27,745	110,891	109,447	169,156	164,032	4	2	308,901	301,226	610,127	346	283	629
9 –10	685,000	650	698	112,260	109,507	201,677	195,210	130	163	314,717	305,578	620,295	423	292	715
10 –11	731,000	69	64	103,941	100,646	230,828	224,029	5,490	5,523	340,328	330,262	670,590	445	302	747
11 –12	768,000	23	23	46,901	45,905	240,363	234,978	61,706	59,387	348,993	340,293	689,286	445	338	783
12 –13	741,000	4	7	1,046	1,191	201,747	199,214	97,372	93,892	300,169	294,304	594,473	507	339	846
13 –14	529,000	—	6	69	94	141,652	141,621	72,082	70,812	213,803	212,533	426,336	441	240	681
14 –14½	539,000	—	1	35	54	27,028	27,199	14,239	14,017	41,302	41,271	82,573	303	106	409
14½–14¾		—	—	4	3	4,038	3,520	4,351	3,849	8,393	7,372	15,765			
14¾–14¾		—	—	4	2	2,231	1,944	3,246	3,005	5,481	4,951	10,432			
14¾–15		—	1	3	1	1,408	1,355	2,676	2,540	4,067	3,897	7,964			
15 – 16	606,000	—	1	3	6	1,701	1,733	6,478	6,639	8,182	8,375	16,557	204	25	229
16 and over	3,447,000[5]	—	—	—	1	143	134	1,105	1,308	1,248	1,443	2,691	108	114	222
Total	—	600,900	579,373	526,645	515,174	1,429,104	1,394,399	268,880	261,137	2,825,509	2,750,179	5,575,688[4]	4,349	2,891	7,240
Total under 11	—	600,873	579,334	478,880	467,917	808,793	782,701	5,625	5,688	1,893,871	1,835,740	3,729,611	—	—	—
Total 11 and over	—	27	39	48,065	47,257	620,311[3]	611,698[3]	263,255	255,449	931,638	914,439	1,846,077	—	—	—
Total 14¼ and over	—	—	2	14	13	9,521	8,686	17,856	17,341	27,371	26,038	53,409	—	—	—

[1] *There were* 150 *pupils under* 3 *years of age.*
[2] *In addition there were on* 31/3/33 58 *nursery schools, with accommodation for* 4,750.
[3] *Of these totals,* 83,135 *boys and* 79,375 *girls are receiving a separately organised course of instruction for all children over* 11 *without any inception.*
[4] *There are* 28,182 *boys and* 24,106 *girls in certified special schools included in this total.*
[5] 1,789,000 *pupils under* 3 *are included in this total.*

TABLE 1—*continued*

AGE	GRANT-AIDED SECONDARY SCHOOLS		PART-TIME TECHNICAL AND ART						FULL-TIME TECHNICAL AND ART				AGRICULTURE[1]	INDEPENDENT SECONDARY SCHOOLS
			EVENING CLASSES		DAY CONTINUATION		DAY CLASSES		SENIOR		JUNIOR			See Table 9
	BOYS	GIRLS	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE		
Under 7	1,185	2,162	—	—	—	—	—	—	—	—	—	—	NOT CLASSIFIED BY AGE OR SEX	TRAINING COLLEGES
7– 8	965	2,012	—	—	—	—	—	—	—	—	—	—		Male . . 6,930
8– 9	1,989	2,895	—	—	—	—	—	—	—	—	—	—		Female . . 12,655
9–10	3,729	4,093	—	—	—	—	—	—	—	—	—	—		Total . 19,585
10–11	7,358	7,142	—	—	—	—	—	—	—	—	—	—		UNIVERSITIES FULL-TIME
11–12	23,544	20,829	—	—	—	—	—	—	—	—	—	—		FIRST DEGREE OR DIPLOMA: MALE 26,288; FEMALE 9,011 — ADVANCED: MALE 1,789; FEMALE 350
12–13	41,193	36,523	—	—	—	—	—	—	—	—	Under 13 851	219		
13–14	36,127	31,748	Under 14 11,513	12,054	—	—	—	—	—	—	3,039	894		PART-TIME
14–15	34,509	29,801	52,393	46,589	Under 15 3,371	3,994	Under 15 3,411	2,641	Under 15 669	547	5,521	2,338		FIRST DEGREE OR DIPLOMA: MALE 3,143; FEMALE 847 — ADVANCED: MALE 1,306; FEMALE 308
15–16	36,265	29,929	53,086	38,887	2,794	2,798	3,538	1,394	798	723	4,837	2,253		
16–17	23,530	19,712	57,513	36,449	1,530	1,299	5,438	1,671	1,221	1,175	16 and over 1,978	1,046		OCCASIONAL
17–18	12,029	10,616	57,846	33,465	1,345	781	6,467	2,058	1,320	1,270	—	—		MALE 3,369 — FEMALE 1,597
18–19	5,268	4,409	18–21 100,574	58,465	18 and over 192	34	18–21 14,004	4,366	18–21 2,495	2,203	—	—		
19 and over	1,354	1,045	21 and over 134,559	223,953	—	—	21 and over 13,460	17,508	21 and over 1,520	1,155	—	—		ADULT EDUCATION (GRANT-AIDED CLASSES ONLY)
Total	229,045	202,916	467,484	449,862	9,232	8,906	46,318	29,638	8,023	7,073	16,226	6,750	20,914	Male . . 25,321
														Female . . 25,711

[1] *For details see Table* 17.

TABLE 2

ENGLAND AND WALES: ELEMENTARY EDUCATION, MARCH 31st, 1932

Summary of Statistics by Type and Number of Authorities: Average Cost per Pupil; Number, Type and Average Size of Departments; Number of Classes; Number and Accommodation of Certified Special Schools; Teachers, Total Number, Percentage of Certificated, Percentage of Women.

	COUNTY COUNCILS		BOROUGHS AND URBAN DISTRICTS	COUNTY BOROUGHS	LONDON	TOTAL
	URBAN PARTS	RURAL PARTS				
1. Number of Authorities .	62		Boroughs 132 U.D.s 39	83	1	317
2. Average cost per Pupil[1]	s. d. 228 9		s. d. Boroughs 240 1 U.D.s 278 4	s. d. 247 11	s. d. 357 9	s. d. 252 5
3. Number and Type of Departments:						
Senior Boys . .	91	10	129	264	123	617
,, Girls . .	94	12	124	258	121	609
,, Mixed . .	212	105	117	216	39	689
All Ages Boys . .	530	260	398	831	334	2,353
,, Girls . .	548	280	423	865	349	2,465
,, Mixed . .	1,690	8,572	638	1,045	150	12,095
Junior Boys . .	90	45	90	161	136	522
,, Girls . .	111	33	103	194	141	582
,, Mixed . .	660	1,591	475	1,038	126	3,890
Infants . . .	1,619	930	1,125	2,067	663	6,404
Total . .	5,645	11,838[2]	3,622	6,939	2,182	30,226
Average Size of Departments	177	82	217	249	237	166
4. (*a*) Number of Classes .	30,148	37,651	22,785	47,235	14,576	152,395
(*b*) With over 50 Pupils	1,636	578	1,232	3,801	663	7,910
(*c*) Percentage of (*b*) to (*a*)	5·5	1·6	5·5	8·1	4·5	5·2
5. Certified Special Schools:						
(*a*) Number . .	22		59	223	132	436
(*b*) Accommodation .	1,527		3,987	21,319	13,044	39,877
6. Teachers:						
(*a*) Total Number .	71,471		25,828	54,932	17,755	169,986
(*b*) Percentage of Certificated .	59·7		80·7	86·7	94·9	75·3
(*c*) Percentage of Women . .	75·8		71·4	73·5	68·4	73·6
(*d*) Teachers per 1,000 Pupils[1] . .	36·2		32·8	31·8	34·4	34·0

[1] *Based on average attendance.*

[2] *Of this number,* 8,847 *departments have an average attendance of less than* 100 *pupils.*

TABLE 3

ENGLAND AND WALES: PUBLIC ELEMENTARY SCHOOLS

Summary Figures of Schools, Accommodation, Average Number on Registers, Average Attendance and Number of Teachers, March 31st, 1932.

	SCHOOLS	DEPARTMENTS	AVERAGE NUMBER ON REGISTERS	AVERAGE ATTENDANCE	NUMBER OF TEACHERS
Public Elementary Schools	20,898	30,226	5,576,419	5,005,666	169,986
Non-local Schools [1]	37	39	5,620	5,376	192
Certified Efficient Schools [2]	18	18	717	634	37
Certified Special Schools	623	623	52,198	45,612	2,649
Nursery Schools	55	—	3,768	2,911	114
Total	21,631	30,906	5,638,722	5,060,199	172,978
Classification of Public Elementary Schools by Type of School					
Council	9,821	16,200	3,745,577	3,363,700	
Church of England	9,501	11,697	1,381,823	1,242,374	
Wesleyan	111	139	20,018	17,929	
Roman Catholic	1,200	1,878	388,382	345,132	
Jewish	13	19	5,404	4,766	
Other Voluntary Schools	252	293	35,215	31,765	
Total	20,898	30,226	5,576,419	5,005,666	

[1] *Certain public elementary schools not maintained by the local education authority, which are attached to boarding institutions the managers of which receive grants from the Board of Education.*

[2] *An elementary school which, although it does not receive grants, is open to inspection and is certified efficient by the Board of Education.*

TABLE 4

ENGLAND AND WALES. MAINTAINED PUBLIC ELEMENTARY SCHOOLS

Classes by Size (Number on Registers) on March 31st of the Years 1920 to 1932

DATE	NUMBER OF CLASSES WITH NUMBER OF PUPILS ON REGISTERS						
	UNDER 20	20 AND UNDER 30	30 AND UNDER 40	40 AND UNDER 50	50 AND UNDER 60	60 AND OVER	TOTAL
March 31st, 1920 .	11,351	25,312	36,417	38,960	31,186	6,961	150,187
,, ,, 1921 .	11,835	26,690	37,947	39,494	29,369	5,745	151,080
,, ,, 1922 .	11,793	27,204	39,170	40,157	28,038	4,967	151,329
,, ,, 1923 .	11,061	26,098	39,107	41,011	27,150	4,018	148,445
	NOT OVER 20	OVER 20 BUT NOT OVER 30	OVER 30 BUT NOT OVER 40	OVER 40 BUT NOT OVER 50	OVER 50 BUT NOT OVER 60	OVER 60	TOTAL
,, ,, 1924 .	13,191	27,929	40,497	40,602	24,469	489	147,177
,, ,, 1925 .	13,362	28,571	41,278	43,323	20,699	633	147,866
,, ,, 1926 .	13,879	30,014	43,442	42,848	19,732	237	150,152
,, ,, 1927 .	13,589	29,535	43,586	43,062	19,926	275	149,973
,, ,, 1928 .	13,629	29,841	44,686	45,602	16,517	169	150,444
,, ,, 1929 .	13,983	30,398	46,189	49,479	10,798	85	150,932
,, ,, 1930 .	13,896	30,562	46,632	50,480	9,928	89	151,587
,, ,, 1931 .	14,219	30,527	47,590	51,155	8,504	67	152,062
,, ,, 1932 .	12,844	29,056	49,644	52,865	7,910	76	152,395

Notes.—(1) *As will be seen, the basis of these figures was changed in* 1924, *so that the figures before that date are not strictly comparable with those after it.*

(2) *Of the* 83,452 *classes confined to children under* 11 *in* 1932, 45,416 *were not over* 40, 32,235 *over* 40 *but not over* 50, *and* 5,811 *over* 50. *The corresponding figures for the* 36,938 *classes confined to children over* 11 *were* 27,157, 9,146, *and* 635 ; *and for the* 32,005 *classes containing children both under and over* 11, 18,971, 11,484, *and* 1,550.

TABLE 5—ENGLAND AND WALES: PUBLIC ELEMENTARY SCHOOLS

Classes on March 31st, 1932, by Grade and Sex of Teacher in charge, and by Age-range and Sex of Pupils

GRADE AND SEX OF TEACHER IN CHARGE	CLASSES WITH AGE-RANGE[1]— UNDER 11 — CONTAINING BOYS ONLY	UNDER 11 — CONTAINING GIRLS ONLY	UNDER 11 — CONTAINING BOYS AND GIRLS	UNDER 11 — TOTAL	BOTH UNDER AND OVER 11 — CONTAINING BOYS ONLY	BOTH UNDER AND OVER 11 — CONTAINING GIRLS ONLY	BOTH UNDER AND OVER 11 — CONTAINING BOYS AND GIRLS	BOTH UNDER AND OVER 11 — TOTAL	11 AND OVER — CONTAINING BOYS ONLY	11 AND OVER — CONTAINING GIRLS ONLY	11 AND OVER — CONTAINING BOYS AND GIRLS	11 AND OVER — TOTAL	TOTAL — CONTAINING BOYS ONLY	TOTAL — CONTAINING GIRLS ONLY	TOTAL — CONTAINING BOYS AND GIRLS	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Certificated Head (Men)	38	—	99	137	251	1	2,375	2,627	870	13	3,699	4,582	1,159	14	6,173	7,346
2. Certificated Head (Women)	35	108	4,323	4,466	4	255	4,204	4,463	8	805	609	1,422	47	1,168	9,136	10,351
3. Certificated Assistant (Men)	3,078	1	1,181	4,260	4,972	3	2,820	7,795	10,483	14	4,426	14,923	18,533	18	8,427	26,978
4. Certificated Assistant (Women)	3,139	6,125	34,404	43,668	716	5,204	5,986	11,906	269	10,542	3,927	14,738	4,124	21,871	44,317	70,312*
5. Uncertificated (Men)	453	—	262	715	366	—	386	752	190	—	154	344	1,009	—	802	1,811
6. Uncertificated (Women)	1,228	1,797	20,391	23,416	225	848	3,126	4,199	33	457	357	847	1,486	3,102	23,874	28,462
7. Supplementary (Women)	79	98	6,472	6,649	7	14	213	234	1	9	6	16	87	121	6,691	6,899
8. Other (Men)	19	—	5	24	6	—	11	17	22	1	9	32	47	1	25	73
9. Other (Women)	1	6	110	117	—	1	11	12	—	24	10	34	1	31	131	163
10. Total	8,070	8,135	67,247	83,452	6,547	6,326	19,132	32,005	11,876	11,865	13,197	36,938	26,493	26,326	99,576	152,395

[1] *In determining the age-range of classes, age-groups at either end of the range, if relatively small, are ignored.*

TABLE 6—ENGLAND AND WALES: PRACTICAL INSTRUCTION

Provision for Practical Instruction for Pupils of 11 years of age and over, by Type of Department

TYPE OF DEPARTMENT	DEPARTMENTS ON MARCH 31ST, 1932, WHICH MADE PROVISION DURING THE YEAR FOR INSTRUCTION IN— DOMESTIC SUBJECTS — AT CENTRES	DOMESTIC SUBJECTS — ON SCHOOL PREMISES	HANDICRAFT — AT CENTRES	HANDICRAFT — ON SCHOOL PREMISES	GARDENING — AT CENTRES	GARDENING — ON SCHOOL PREMISES	OTHER SUBJECTS — AT CENTRES	OTHER SUBJECTS — ON SCHOOL PREMISES	TOTAL NUMBER OF DEPARTMENTS[1]	TOTAL NUMBER OF DEPARTMENTS MAKING NO PROVISION FOR PRACTICAL INSTRUCTION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Senior Boys	3	1	289	318	13	113	23	176	611	6
2. Senior Girls	362	246	6	107	1	40	15	61	609	—
3. Senior Mixed	361	308	308	351	7	240	13	128	683	6
4. Boys	6	—	1,776	313	34	527	35	145	2,192	161
5. Girls	2,185	156	11	125	1	25	16	64	2,344	121
6. Mixed	6,175	880	4,278	2,107	57	4,533	102	230	9,509	2,586
7. Total	9,092	1,591	6,668	3,321	113	5,478	204	804	15,948	2,880

[1] *Departments making provision for instruction in more than one subject have been counted once only in this column.*

TABLE 7

ENGLAND AND WALES: TEACHERS IN PUBLIC ELEMENTARY SCHOOLS ON MARCH 31st, 1932

(1) *By Sex, Numbers and Qualification*

SEX (1)	CERTIFICATED (2)	PERCENTAGE [1]	UNCERTIFICATED (3)	PERCENTAGE [1]	SPECIAL SUBJECTS (OTHER THAN CERTIFICATED) (4)	PERCENTAGE [1]	SUPPLEMENTARY, ETC. (5)	PERCENTAGE [1]	TOTAL (6)	PERCENTAGE [1]	GRADUATES (7)	PERCENTAGE [1]
Male . .	40,963	91·5	1,871	4·2	1,872	4·2	53	—	44,759	26·3	3,946	8·8
Female . .	87,163	69·6	27,895	22·3	3,153	2·3	7,016	5·6	125,227	73·7	3,626	2·9
Total .	128,126	75·4	29,766	17·5	5,025	2·9	7,069	4·2	169,986	—	7,572	4·5

[1] *Percentages are of the total in col.* 6.

(2) *Teachers not Classified by Sex*

Other Adult Full-time Teachers	201
Part-time Teachers	1,010
Occasional Emergency Teachers	3,963
Pupil Teachers	854
Student Teachers	1,944
Monitors	841
Total . .	8,813
Grand Total all P.E.S. Teachers	178,799

(3) *Teachers by Sex of Pupils Taught*

SEX OF TEACHER	BOYS ONLY	GIRLS ONLY	BOYS AND GIRLS
Male . . .	20,748	33	15,427
Female . . .	5,745 [2]	26,293	84,149 [3]
Total .	26,493	26,326	99,576

[2] *Of this number,* 4,482 *were teaching children under* 11.
[3] *Of this number,* 65,700 *were teaching children under* 11.

(4) *Membership of Teachers' Organisations*

—	NATIONAL UNION OF TEACHERS	NATIONAL ASSOCIATION OF SCHOOLMASTERS	NATIONAL UNION OF WOMEN TEACHERS	NATIONAL ASSOCIATION OF HEAD TEACHERS	NATIONAL FEDERATION OF CLASS TEACHERS
Male	41,398	9,000	—	9,463	8,374
Female	102.273	—	approx. 8,000		
Total . .	143,671	9,000	8,000	9,463	8,374

TABLE 8

ENGLAND AND WALES: SECONDARY, TECHNICAL AND FURTHER EDUCATION ON MARCH 31st, 1932

By Type of Authority, Institutions and Number of Pupils

(1)	ADMINISTRATIVE COUNTIES (2)	COUNTY BOROUGHS (3)	LONDON (4)	TOTAL (5)
Population . . .	22,242,398	13,308,712	4,396,821	39,947,931
1. Secondary Schools:				
(*a*) Total Pupils .	235,701	157,227	38,133	432,061
Percentage of Col. 5 . . .	54·2	36·3	8·8	—
(*b*) Free Pupils .	113,245	80,334	15,512	209,091
Percentage of 1 (*b*) to 1 (*a*) . .	48·0	51·0	40·6	48·3
Percentage of Col. 5 . . .	54·1	38·3	7·4	—
(*c*) Pupils per 1,000 of Population .	11·5	10·4	8·2	10·8
2. Junior Technical and Junior Housewifery Schools .				
(*a*) Schools . .	67	72	43	182
(*b*) Pupils . .	6,753	9,408	4,842	21,003
3. Junior Departments in Art Schools:				
(*a*) Schools . .	13	18	4	35
(*b*) Pupils . .	569	1,238	166	1,973
4. Senior Full-time Courses in Colleges:				
(*a*) Schools . .	8	38	13	59
(*b*) Students .	594	4,687	3,127	8,408
5. Technical Day Classes:				
(*a*) Schools . .	64	85	27	176
(*b*) Students .	5,179	17,356	5,354	27,889
6. Art Schools (including Junior Dements):				
(*a*) Schools . .	125	89	15	229
(*b*) Students .	18,590	30,930	6,764	56,284
7. Day Continuation Schools:				
(*a*) Schools . .	16	21	20	57
(*b*) Students .	2,035	6,649	9,454	16,832
8. Institutions in which Evening Instruction is given:				
(*a*) Evening Institutes . .	3,678	785	259	4,722
(*b*) Students .	304,992	201,397	150,583	656,972
(*c*) Colleges .	39	75	26	140
(*d*) Students .	36,720	118,211	53,763	208,694

TABLE 9

ENGLAND AND WALES. SECONDARY SCHOOLS BY TYPE OF SCHOOL, NUMBERS AND SEX OF PUPILS, 1932

TYPE OF SCHOOL	SCHOOLS	BOYS	GIRLS	MIXED	NO. OF PUPILS		
					BOYS	GIRLS	TOTAL
I. Schools recognised by the Board of Education as eligible for grant:							
(*a*) Council	742	201	272	269	119,172	123,078	242,250
(*b*) Welsh Intermediate . .	102	22	24	56	14,833	13,926	28,759
(*c*) Aided:							
(1) Roman Catholic . .	87	25	62	—	7,665	16,074	23,739
(2) Foundation and other .	448	253	130	65	87,375	49,938	137,313
Total . .	1,379[1]	501	488	390	229,045	203,016	432,061
II. Independent Boys' Schools:							
(*a*) Public Schools . . .	83[2]	82	—	1	29,737	111	29,848
(*b*) Preparatory Schools:							
(1) Recognised as efficient	240	213	—	27	15,693	1,615	17,308
(2) Other members of Preparatory Schools Association . .	277	277	—	—	12,500	—	12,500
(*c*) Other schools recognised as efficient . . .	65	56	—	9	8,334	781	9,115
Total . .	665	628	—	37	66,264	2,507	68,771
III. Independent Girls' Schools:							
(*a*) Recognised as efficient . .	272	—	272[3]	—	1,176	33,276	34,452
(*b*) Other Schools members of the Association of Convent Schools.	150	—	150	—	—	13,000	13,000
Total . .	422	—	422	—	1,176	46,276	47,452
Total of I, II and III . .	2,466	1,129	910	427	296,485	251,799	548,284

IV. Other Schools. There are 569 schools which are members of the Independent Schools Association which are not recognised as efficient by the Board of Education, and there are about 250 other schools, mainly Roman Catholic, which can be identified as secondary; but the information available is not sufficient to justify an estimate of the number of their pupils. The total is probably between 30,000 and 40,000.

NOTE.—*The figures in Section I of this table relate to March* 31*st*, 1932. *Those in Section II (except for (b) (2) and for* 17 *schools in (a)) and Section III (a) relate to October* 1*st*, 1932. *The other figures are based on the latest information available with regard to Independent Schools not recognised as efficient and can only be regarded as approximate.*

1 *On October* 1*st*, 1932, *there were* 1,378 *schools with a total of* 449,717 *pupils* (240,109 *boys and* 209,608 *girls*).

2 *Of the* 194 *schools which are members of the Head Masters' Conference* 70 *are on the grant list (included in Section I),* 66 *are recognised as efficient by the Board of Education,* 17 *have not applied for inspection or have withdrawn from the efficient list and the remaining* 41 *are outside England and Wales. Including the* 66 *Public Schools thus recognised there were* 48,017 *boys and* 35,783 *girls in* 643 *schools recognised as efficient on October* 1*st*, 1932.

3 *Including* 25 *Preparatory Schools. Twenty-seven of the* 272, *with* 3,522 *pupils, are Roman Catholic Schools.*

TABLE 10

ENGLAND AND WALES: GRANT-AIDED SECONDARY SCHOOLS

Classes on October 1st, 1932, by Size

(1)	CLASSES CONTAINING— NOT OVER 20 (2)	OVER 20 BUT NOT OVER 25 (3)	OVER 25 BUT NOT OVER 30 (4)	OVER 30 BUT NOT OVER 35 (5)	OVER 35 (6)	TOTAL (7)
1. Council Schools	2,618	1,706	2,846	2,903	125	10,198
2. Roman Catholic Schools	290	184	242	273	7	996
3. Foundation and other Schools	2,098	1,210	1,667	1,020	40	6,035
4. Welsh Intermediate Schools	199	167	247	457	37	1,107
5. (*a*) Total	5,205	3,267	5,002	4,653	209	18,336
(*b*) Percentage	28·4	17·8	27·3	25·4	1·1	100·0
October 1st, 1931	29·2	18·6	27·2	23·9	0·9	

TABLE 11

ENGLAND AND WALES: ADMISSION TO GRANT-AIDED SECONDARY SCHOOLS FROM PUBLIC ELEMENTARY SCHOOLS

During Year Ended March 31st, 1932

	BOYS	GIRLS	TOTAL
Number	40,742	34,439	75,181
Percentage of total leavers	23·5	24·2	23·6

TABLE 12

ENGLAND AND WALES: OUTPUT TO UNIVERSITIES OF EX-P.E.S. PUPILS

Year Ended July 31st, 1932

	BOYS	GIRLS	TOTAL
Free	1,652	704	2,356
Fee-paying	400	176	576
Total	1,792	880	2,672
Percentage of Total from Grant-aided Secondary Schools	46·0	19·3	65·3
Percentage of Total admitted to Universities in 1930–1	18·9	7·9	26·8

TABLE 13

ENGLAND AND WALES: SECONDARY SCHOOLS, FULL-TIME PUPILS ON MARCH 31st, 1932

AGE OF PUPILS	FEE-PAYING PUPILS			FREE PUPILS[1]			TOTAL		GRAND TOTAL
	BOYS	GIRLS	PERCENTAGE OF GRAND TOTAL	BOYS	GIRLS	PERCENTAGE OF GRAND TOTAL	BOYS	GIRLS	
Under 11 years of age .	14,610	17,780	96·5	616	524	3·4	15,226	18,304	33,530
11 years of age and over	103,070	87,510	47·8	110,749	97,202	52·1	213,819	184,712	398,531
Total .	117,680	105,290	51·6	111,365	97,726	48·3	229,045	203,016	432,061

TABLE 14

ENGLAND AND WALES: APPROVED FIRST AND SECOND EXAMINATIONS, YEAR ENDED JULY 31st, 1932

APPROVED FIRST EXAMINATION							APPROVED SECOND EXAMINATION						
SCHOOLS	PUPILS WHO				PERCENTAGE WHO PASSED		SCHOOLS	PUPILS WHO				PERCENTAGE WHO PASSED	
	SAT		PASSED					SAT		PASSED			
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS		BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
1,351	33,154	23,737	24,216	17,329	73·0	73·0	1,194	6,863	3,728	4,809	2,465	70·1	66·1

TABLE 15

ENGLAND AND WALES: ADVANCED COURSES[2] FOR YEAR ENDED JULY 31st, 1932

TYPE OF SCHOOL	NUMBER OF SCHOOLS	NATURE OF COURSES OF ADVANCED INSTRUCTION						TOTAL
		SCIENCE AND MATHEMATICS	CLASSICS	MODERN STUDIES	CLASSICS WITH MODERN STUDIES	GEOGRAPHY	OTHER COMBINATIONS	
Boys . .	174	159	34	60	6	3	23	285
Girls . .	111	27	2	95	—	—	9	133
Boys and Girls .	55	43	1	24	1	1	4	74
Total .	340	229	37	179	7	4	36	492

[1] *A "free pupil" means a pupil who was exempt from payment of a tuition fee at or about the time of admission.*

[2] *An "advanced course" is an organised course of advanced instruction in a group of subjects extending over two years for pupils who, at the commencement, have already reached the standard of an approved first examination.*

TABLE 16

ENGLAND AND WALES: TEACHERS IN SECONDARY SCHOOLS ON MARCH 31st, 1932

By Sex and Qualification

	MEN	WOMEN	TOTAL
A. FULL-TIME			
1. Graduates:			
(*a*) Head Teachers			
(i) Trained	324	114	438
(ii) Not Trained	530	327	857
(*b*) Assistants			
(i) Trained [1]	4,781	4,321	9,102
(ii) Not Trained	3,852	2,570	6,422
(*c*) Specialists [3]	31	15	46
Total	9,518	7,347	16,865
2. Non-Graduates:			
(*a*) Head Teachers			
(i) Trained [3]	3	13	16
(ii) Not Trained	3	18	21
(*b*) Assistants			
(i) Certificated [2]			
(*a*) Trained [1]	415	643	1,058
(*b*) Not Trained	55	75	130
(*c*) Specialists [3]	663	1,350	2,013
(*d*) Other Teachers			
(i) Trained [1]	31	70	101
(ii) Not Trained	598	1,491	2,089
Total	1,768	3,660	5,428
B. PART-TIME [4]	269	291	560
Other Part-time	—	—	1,933
Grand Total	11,555	11,298	24,786
Percentage of Graduates, excluding Part-time	82·4	65·0	68·0

[1] *Covers any accepted course of training of at least one year's duration.*

[2] *Teachers possessing recognition under the code of Regulations for Public Elementary Schools.*

[3] *Includes Art, Music, Handicraft, Domestic Subjects and Physical Training.*

[4] *Teachers who make up full-time service in recognised schools of other types.*

TABLE 17

ENGLAND AND WALES: FURTHER EDUCATION, MARCH 31st, 1932

(1) FULL-TIME

SEX	JUNIOR SCHOOLS		TECHNICAL DAY CLASSES		SENIOR COURSES IN COLLEGES	ART SCHOOLS	SCHOOLS OF NAUTICAL TRAINING	TOTAL
	TECHNICAL AND HOUSEWIFERY SCHOOLS	DEPARTMENTS IN ART SCHOOLS	SENIOR	JUNIOR				
Male .	15,034	1,192	209	726	4,990	2,098	989	25,238
Female	5,969	781	889	789	1,889	3,506	—	13,823
Total .	21,003	1,973	1,098	1,515	6,879	5,604	989	39,061

(2) PART-TIME

SEX	ART SCHOOLS	SENIOR COURSES IN COLLEGES	TECHNICAL DAY CLASSES		DAY CONTINUATION SCHOOLS	EVENING CLASSES	TOTAL	GRAND TOTAL FULL AND PART-TIME
			PART-TIME	SHORT FULL-TIME				
Male .	26,804	1,040	17,278	5,000	9,232	439,680	499,034	524,272
Female	23,876	489	6,842	705	8,906	425,986	466,804	480,627
Total .	50,680	1,529	24,120	5,705	18,138	865,666	965,838	1,004,899

(3) TEACHING STAFF

SEX	PRINCIPALS	HEADS OF DEPARTMENTS	ASSISTANTS GRADUATES	ASSISTANTS CLASSIFIED AS GRADUATES	ASSISTANTS NON-GRADUATES	INSTRUCTORS	TOTAL
Men .	426	306	1,026	341	538	327	2,964
Women .	54	21	185	76	346	107	789
Total .	480	327	1,211	417	884	434	3,753

TABLE 18

ENGLAND AND WALES: AGRICULTURAL EDUCATION, MARCH 31st, 1932

	FARM INSTITUTES	ORGANISED DAY COURSES	EVENING CLASSES	CORRESPONDENCE COURSES	INSTRUCTION IN MANUAL PROCESSES	LECTURES, DEMONSTRATIONS, ETC.
Number of Courses .	133	462	456	7	265	—
Number of Students .	1,618	5,380	11,514	114	2,288	—
Number of Meetings .	—	—	—	—	—	10,617

NUMBER OF STUDENTS AT UNIVERSITY DEPARTMENTS OF AGRICULTURE, AGRICULTURAL COLLEGES AND COUNTY FARM INSTITUTES

YEAR	1927	1928	1929	1930	1931	1932
Number of Students .	1,858	1,921	1,993	2,184	2,176	2,188

ANALYSIS OF STUDENTS	HIGHER INSTITUTIONS	FARM INSTITUTES	WOMEN STUDENTS
Number of Students . .	1,531	657	571

NUMBER OF SCHOLARSHIPS AWARDED AND TOTAL AMOUNT EXPENDED

YEAR	1926–7	1927–8	1928–9	1929–30	1930–1	1931–2
Number of Scholarships	1,475	1,460	1,433	1,510	1,841	1,659
Amount Expended .	£17,068	£17,027	£17,948	£18,699	£24,144	£24,696

DISTRIBUTION OF STUDENTS BY TYPE OF COURSE

Agriculture .	779	Horticulture .	214	Dairying .	91	
Poultry Husbandry .	73	Veterinary Science .	349	Estate Management	18	
		Rural Domestic Economy . .	7			

TABLE 19

ENGLAND AND WALES: TRAINING OF TEACHERS, 1931–2

(1) Institutions recognised as Training Colleges

TYPE OF INSTITUTION	PROVIDED BY LOCAL EDUCATION AUTHORITIES	PROVIDED BY OTHER BODIES		TOTAL
		RECOGNISED FOR GRANT	NOT RECOGNISED FOR GRANT	
1. Training Departments of Universities and University Colleges	1	21	—	22
2. Post-graduate Training Colleges . .	—	1	3	4
3. Two-year Training Colleges . .	22	50	2	74
4. Training Colleges for Domestic Subjects .	7	4	—	11
5. Total . . .	30	76	5	111

(2) Students in Training by Type of Course and Sex

TYPE OF COURSE	STUDENTS		
	MEN	WOMEN	TOTAL
1. Four-year Courses . . .	3,217	2,516	5,733
2. Two-year Courses . . .	3,190	8,505	11,695
3. One-year Courses :			
(*a*) Advanced or Post-graduate .	353	508	861
(*b*) Certificated Students . .	1	9	10
4. Third-year Courses :			
(*a*) Degree Courses . .	156	8	164
(*b*) Other Continuous Courses .	12	46	58
(*c*) Deferred Courses . .	1	15	16
5. Domestic Subject Courses :			
(*a*) Two-year Courses . .	—	742	742
(*b*) Third-year Courses :			
(i) Continuous . .	—	191	191
(ii) Deferred . . .	—	11	11
6. Total Students in Training . .	6,930	12,655	19,585

TABLE 20

ENGLAND AND WALES: UNIVERSITY STUDENTS, 1931–2

	FULL-TIME STUDENTS			PART-TIME STUDENTS			STUDENTS TAKING COURSES NOT OF A UNIVERSITY STANDARD	STUDENTS ATTENDING EXTRA-MURAL CLASSES	GRAND TOTAL	STATE SCHOLARSHIPS	
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL				MEN	WOMEN
Birmingham University	1,044	487	1,531	174	28	202	237	1,157	3,127	11	9
Bristol University	589	329	918	17	38	55	440	1,126	2,539	3	3
Cambridge University	5,104	478	5,582	—	—	—	—	1,985	7,784	217	49
Durham University	1,172	379	1,551	338	86	424	305	1,607	3,887	7	8
Exeter University College	259	214	473	131	45	176	166	598	1,413	—	—
Leeds University	1,153	367	1,520	219	99	318	115	1,569	3,522	5	6
Liverpool University	1,311	527	1,838	342	104	446	—	1,235	3,519	7	21
London University	7,849	3,345	11,194	4,805	2,017	6,822	454	2,472	20,942	48	100
Manchester University	1,541	618	2,159	349	58	407	369	1,226	4,161	15	23
Manchester College of Technology	294	3	297	43	3	46	5,747	—	6,090		
Nottingham University College	435	211	646	852	118	970	1,497	2,946	6,059	—	—
Oxford University	3,956	815	4,771	—	—	—	—	1,336	6,107	138	94
Reading University	272	336	608	8	2	10	862	97	1,577	—	1
Sheffield University	577	167	744	105	32	137	1,544	1,423	3,848	1	2
Southampton University College	337	147	484	258	26	284	477	568	1,813	—	—
Aberystwyth University College	504	270	774	10	17	27	45	738	1,584	12	15
Bangor University College	387	165	552	23	14	37	—	942	1,531		
Cardiff University College	809	328	1,137	55	36	91	—	1,000	2,228		
Swansea University College	423	161	584	21	3	24	—	750	1,358		
Total	28,077	9,361	37,438	7,818	2,752	10,570	12,305	22,775	83,088	464	331

TABLE 21—ENGLAND AND WALES: SCHOOL MEDICAL WORK, 1932

I. Medical and Dental Inspection.

(i) Number of public elementary school children with defects other than dental and uncleanliness :

AVERAGE ATTENDANCE	CHILDREN EXAMINED (ROUTINE)	PERCENTAGE NEEDING TREATMENT	CHILDREN SPECIALLY EXAMINED
5,005,666	1,845,503	18·8	1,192,453

(ii) Number of public elementary school children found with :

(*a*)	Malnutrition	10·7 per 1,000
(*b*)	Skin disease	10·4 ,,
(*c*)	Defective vision, etc.	85·6 ,, (not including defective vision of Entrants)
(*d*)	Defects of hearing, etc.	3·7 per 1,000
(*e*)	Enlarged tonsils and adenoids	50·2 ,,
(*f*)	Organic heart disease	1·7 ,,
(*g*)	Tuberculosis	1·5 ,,
(*h*)	Deformities	9·8 ,,
(*i*)	Nervous diseases	1·9 ,,
(*j*)	Number of children found unclean	632,161
(*k*)	Number of dental inspections	3,302,338 (69·2 per cent. referred for treatment)

(iii) Number of secondary school pupils examined . . 224,500

(iv) Staff of school medical service :

(*a*) Doctors = equivalent of 659 whole-time officers, plus 999 specialists.

(*b*) Dentists = equivalent of 555 whole-time officers.

(*c*) Nurses = equivalent of 2,243 whole-time officers.

II. Medical and Dental Treatment.

(i) Number of school clinics—1,855.

(ii) Number of cases treated for :

(*a*)	Minor ailments	936,981
(*b*)	Defective vision and other eye defects	263,917
(*c*)	Enlarged tonsils and adenoids	95,875
(*d*)	Uncleanliness	138,539
(*e*)	Dental	1,400,928

III. Special Schools.

TYPE OF SCHOOL	NUMBER OF SCHOOLS	ACCOMMODATION	TYPE OF SCHOOL	NUMBER OF SCHOOLS	ACCOMMODATION
Blind	77	4,796	Heart Disease	5	276
Deaf	49	4,593	Pulmonary Tuberculosis	38	2,435
Mentally defective	169	16,839	Epileptic	6	609
Cripples	129	12,715	Miscellaneous	3	968
Open-air Schools	146	14,544			

IV. Indirect Means of Amelioration.

(i) Number of Nursery Schools recognised by the Board of Education on March 31st, 1933 = 58 (also many nursery classes in Infants Departments).

(ii) Artificial light treatment = 80 clinics.

(iii) School meals under Sections 82–4 of the Education Act, 1921 :

(*a*) Number of children fed 1931–2 = 319,715.

(*b*) Number of meals 1931–2 = 47,858,215.

(iv) Physical education—in all schools. Number of recognised organisers employed on March 31st, 1933 = 163.

(v) Teaching of hygiene in all schools every week.

CHAPTER THREE

SCOTLAND

I. Governing Enactments

THE statutory provisions as to education in Scotland are contained in a series of enactments extending from 1872 to 1930.

The Education (Scotland) Act of 1872 transferred the powers and duties relating to education from the heritors and ministers of each parish, by whom they had formerly been exercised, and the parish and burgh schools then existing, to school boards elected by rate-payers for each parish or burgh. The Act authorised the transfer to the school boards of schools which had not been established under Parliamentary authority, and practically all these schools except those connected with the Episcopal and Roman Catholic churches were so transferred. The school board were required by the Act to maintain and keep efficient every school under their management, and to supply any deficiency in the accommodation in public schools, and were empowered to establish infant schools and evening schools. The parent was required to provide elementary education in reading, writing and arithmetic for his children between 5 and 13 years of age; and in the event of his failure to do so without reasonable excuse, it was the duty of the school board to compel him.

The Act of 1878 extended the powers of the school boards as to the maintenance of public schools in which the education given did not consist chiefly of elementary instruction, and authorised the Scottish Education Department to make arrangements for the examination of such schools. A system of higher inspection, including the conduct of an examination and the award of a leaving certificate, was accordingly instituted in 1889. The provision in 1892 of a sum of £60,000 for these purposes was followed by the creation of secondary education committees elected for each county for the five principal burghs and the parish of Govan, to whom the powers of the school boards as respects secondary education were entrusted.

The Act of 1908 gave statutory recognition to the secondary education committees, and empowered the school boards to furnish "any form of education or instruction which may from time to time be sanctioned by any code or minute of the Department." It became the duty of the parent under this Act to provide efficient education for his children between 5 and 14 years of age, and a direct responsibility was placed upon school boards for the suitable provision of continuation classes for the further instruction of young persons above the age of 14 years. The school boards were empowered (and might be required by the Department) to provide for the medical examination and supervision of the pupils attending

schools within their area, and it became their duty to provide food and clothing in certain circumstances for neglected children. By the Act of 1913 they were given similar powers and duties as regards the provision of medical treatment.

The Act of 1918 transferred the powers and duties of the school boards to a specially elected Education Authority for each county, and for the burghs of Edinburgh, Glasgow, Aberdeen, Dundee and Leith. The burghs of Edinburgh and Leith were subsequently united. At the same time, the powers and duties of the education authorities were extended and defined in such a way as to permit the development of a complete educational organisation up to the university stage.

It became the duty of the education authority to prepare "a scheme for the adequate provision throughout their area of all forms of primary, intermediate and secondary education in day schools (including provision for teaching Gaelic in Gaelic-speaking areas) without payment of fees." They might include in this scheme, and contribute under certain conditions to the maintenance of, any school not under their own management; and might also provide (without prejudice to the requirement as to adequate provision without fees) for the maintenance and support of a limited number of schools in which fees are charged in some or all of the classes. Provision was made for the transfer to the education authority of the voluntary schools situated in their area on certain definite conditions as to maintenance and management, and for the discontinuance of grants in respect of any such schools not so transferred. The education authority were required also to prepare a scheme to facilitate the attendance at secondary schools, universities, training colleges and central institutions (by the payment of travelling expenses, fees, cost of residence in a hostel, or a bursary or maintenance allowance), of children or young persons qualified for attendance at such institutions who would otherwise be debarred therefrom by reason of the expense involved. A scheme of scales of salaries for the teachers employed satisfying such conditions as to minima as were laid down by the Department was also required. Additional provisions as to the extension of the school age to 15, the provision of continuation classes and the enforcement of attendance thereat were also included in the Act, but will not come into force until a date yet to be fixed by the Department. The authority were required to continue contributions previously made to intermediate and secondary schools not under their own management, but recognised by the Department, and to contribute in each year a determined sum towards the aggregate expense of the "maintenance of training colleges throughout Scotland." They were empowered to supply or aid the supply of nursery schools for children over 2 and under 5 years of age; to contribute to the maintenance of any educational agency or institution approved by the Department; and to make provision of books, by arrangement with public libraries or otherwise, for

adults as well as young persons as an ancillary means of promoting education.

The Local Government (Scotland) Act of 1929 transferred the powers and duties of the specially elected Education Authorities to the County Councils and the Town Councils of Edinburgh, Glasgow, Aberdeen and Dundee. The County Councils of Perth and Kinross and of Moray and Nairn were combined for this purpose, the number of county Education Authorities being thus thirty-one.

II. Administrative System

Education Department

The central authority for education in Scotland (excluding the medical inspection and treatment of school children, which is under the administration of the Department of Health for Scotland, and the agricultural colleges for which the Department of Agriculture are responsible) is the Scottish Education Department. An Advisory Council, consisting of representatives of education authorities and universities, the teaching profession, business, labour, and other interests, is appointed by Order in Council for the purpose of advising the Department on educational matters, and the Department are required to take into consideration any advice or representations submitted to them by the Council.

The Department are empowered to require the education authority to provide additional school accommodation where necessary, or to fulfil their duty of maintaining and keeping efficient any school provided by them ; and their sanction is required before a school can be discontinued or its site changed. Their consent is necessary before the education authority can borrow money on the security of the education fund to meet the cost of capital works. The educational schemes prepared by an education authority are subject to the approval of the Department, who may disapprove such a scheme, after failure to agree upon amendments in conference, and after a public enquiry has been held if requested by the education authority. If agreement is not reached within one month of such disapproval, the matter must be laid before Parliament. The Department are required to make regulations for the training and examination of teachers, and to grant certificates of competency to teachers in accordance therewith. They are responsible for the administration of the Superannuation Scheme for Teachers. All grants to education authorities from the Education (Scotland) Fund are made in accordance with minutes of the Department laid before Parliament. They are empowered also, subject to certain statutory conditions, to make grants to the managers of schools not under the management of education authorities. They have power to compel the governing body of an endowed school, administered under a statutory scheme or provisional order, to give effect to the provisions of the governing instrument ; and they may provide for the inspection of any higher class school not under the management of an education authority. The Department are also responsible for the administration of the schools conducted under the Children Acts in Scotland and of the Royal Scottish Museum.

Regulations

The Regulations as to grants to education authorities include conditions as to the fulfilment of requirements as to salaries of

teachers, attendance, effectiveness of organisation, efficiency of instruction, and sufficiency of educational provision (including medical inspection and treatment for scholars and young persons) within the area ; and it is also a condition of the payment of grants to education authorities and other managers of schools that the Regulations applicable to such schools issued by the Department shall be duly observed. These Regulations are the Code of Regulations for Day Schools, the Secondary Schools (Scotland) Regulations, and the Code of Regulations for Continuation Classes.

The Code of Regulations for Day Schools applies to all day schools except those conducted under the Secondary Schools Regulations. It includes general regulations as to registration, premises, organisation and classification, and size of classes, and requires that a satisfactory education shall be provided in accordance with a scheme of work conforming to the outline given therein and approved by His Majesty's Inspector. The qualifications of all the teachers must be approved by the Department, and a definite qualification under their Regulations for the Preliminary Education, Training and Certification of Teachers is as a rule required. General conditions as to organisation and curriculum are laid down, and the code provides for the issue by the Department of a Day School Certificate (Higher) on leaving school to pupils who have made satisfactory progress during three years' attendance at an approved course in the advanced division ; and of a Day School Certificate (Lower), by the managers of the school to those who have similarly completed two years. The Day School Certificate (Higher) is accepted by certain authorities in lieu of their own preliminary examinations.

A secondary school for the purpose of the Secondary Schools Regulations is a school providing a course of suitable education beyond the primary school stage, extending over at least five years, and leading to the successful presentation, at the Leaving Certificate Examination conducted by the Department, of such proportion of the pupils as may seem to the Department to be reasonable. It may include a primary, junior, or preparatory department. The qualifications of the staff must be approved by the Department, and a definite qualification under their Regulations in relation to the particular subjects of instruction is normally required. The curriculum must be approved by the Department, and must conform to certain general requirements. The efficiency of the instruction and the proficiency of individual scholars are judged by such tests (including oral examination at the school and presentation at the Leaving Certificate Examination) as the Department direct. Similar conditions as to inspection and approval of curricula obtain in the case of those secondary schools in respect of which grants are not paid, but which are inspected by the Department and present pupils at the Leaving Certificate Examination. The fact that the leaving certificate is accepted by many universities and other authorities in lieu of their own preliminary examinations has brought most of the secondary schools in Scotland under the inspection of the Department.

The Code of Regulations for Continuation Classes provides for the submission of schemes of instruction for the further education of persons who have left school, and outlines a scheme of organisation extending from preparatory classes to definitely organised courses in suitable subjects for a period of four or more sessions, and lectures and classes of a tutorial nature approximating to a university standard. The regulations prescribe the qualifications for enrolment and the general conditions under which the courses must be conducted, and the qualifications of all the teachers must be approved by the Department, who are prepared on certain conditions to endorse the certificates issued by an education

authority to students who have satisfactorily completed a course of not less than four years' duration.

The Regulations as to Grants to Central Institutions provide for the approval by the Department of the scheme of work, the qualifications of all the teachers, and the annual estimate of expenditure; for the inspection of the institution and the audit of the accounts; and for the approval of the regulations as to the qualifications of the students to be admitted and of the conditions for the award of diplomas and certificates. Regulations have been made for the award of national certificates in Chemistry, Chemical Engineering, Mechanical Engineering, Electrical Engineering, Gas Engineering and Naval Architecture by the professional institutions in association with the Department.

Under the regulations for the Preliminary Education, Training and Certification of Teachers, the possession of a leaving certificate is required for admission to training, and in the case of men a teacher's certificate will not be issued unless a university degree or the diploma of a central institution has been obtained. In addition to the course of training for the Teacher's General Certificate, the Regulations provide for the institution of courses for (1) a special certificate which is a qualification for giving advanced instruction in literary or scientific subjects, and (2) a technical certificate which qualifies the holder to give instruction in such technical subjects as Art, Educational Handwork, Domestic Science, etc. The basis of a special certificate is a university degree with first- or second-class honours in the relative subject, and of a technical certificate the appropriate diploma of a central institution.

The functions of the Department as regards the training and examination of teachers are largely entrusted to the National Committee for the Training of Teachers, whose members are elected by the education authorities. The National Committee delegate the management of the training centres at St. Andrews (including Dundee), Glasgow, Aberdeen and Edinburgh to Provincial Committees representing the National Committee, the University, the teaching profession, and others. In addition there are three denominational training colleges for women managed by the National Committee through special Committees of Management, and the Dunfermline College of Hygiene and Physical Education carried on by the Carnegie Dunfermline Trust on behalf of the National Committee. On completion of training a probation certificate is issued by the Department to the teacher, which is replaced by the appropriate final certificate after two years' satisfactory service in schools.

The Inspectorate

The inspectorate is organised in four territorial divisions, each under a Chief Inspector, who has special charge of the secondary schools and of the training of teachers within the division. The general supervision of the training of teachers is entrusted to the Senior Chief Inspector. The medical officer of the Department is also Inspector of Physical Training.

The Local Education Authorities

The Town and County Councils are required by the Act of 1929 to constitute an Education Committee in accordance with a scheme approved by the Scottish Education Department, and all matters relating to education must stand referred to this committee, except where it is otherwise specified in the administrative scheme for the purpose of co-ordinating the services provided by the Council. The Council, before exercising their functions in relation to any

matter thus referred to the Education Committee, must receive and consider the report of the Committee unless in their opinion the matter is urgent. The Council may also delegate to the Committee any of their functions except the power of raising money by rate or loan, or of incurring capital expenditure.

The schemes for the constitution of an Education Committee must provide (1) for the appointment of a majority of the Committee from members of the Council; (2) for the appointment by the Council of persons of experience in education and of persons acquainted with the needs of the various kinds of schools in the area—including at least two persons interested in the promotion of religious instruction (to be nominated by the churches or denominational bodies having places of worship within the area and not represented in relation to transferred schools), and at least one representative nominated by the church or denominational body by whom the teachers of any transferred school are required to be approved; (3) for the appointment of women as well as men; and (4) for the inclusion of one or more members of the former education authority on the Education Committee first to be appointed.

Subject to any regulations or directions by the Council, an Education Committee may appoint sub-Committees which may consist, to an extent not exceeding one-half, of persons who are not members of the Council. The appointment to a sub-Committee of a person who is not a member of the Council or of the Committee, however, requires the consent of the Council. The Education Committee may delegate functions to their sub-Committees except as regards the appointment, transfer, remuneration, or dismissal of teachers, the appointment of bursars, and the exercise of their powers to facilitate attendance at secondary schools and other institutions, and the recognition, establishment, or discontinuance of schools or of centres of advanced technical instruction.

The education authority are required by the Act of 1918 to submit for the approval of the Department a scheme for the constitution of School Management Committees for the management of schools or groups of schools throughout their area. The scheme must provide for the due representation on each Committee of the education authority and of the parents of children attending the schools under its management; for the appointment on the nomination of the teachers engaged in such schools, or in their default by the authority, of at least one such teacher; for the appointment of at least one member in whose selection regard shall be had to the religious belief of the parents of the children attending any denominational school transferred to the education authority; and, in the case of a county, for the appointment on the nomination of local bodies, or in their default directly, of persons resident in the locality and otherwise qualified to represent local interests in school management. The School Management Committees have, subject to any regulations and restrictions made by the education authority, all the powers and duties of that authority as to the general management of the school or group of schools, including attendance thereat, but subject to exceptions as to the raising of money by rate or loan and the general control of expenditure, the acquisition or holding of land, the appointment, transfer, remuneration and dismissal of teachers, the appointment of bursars, and the exercise of powers to facilitate attendance at secondary schools and other institutions, and the recognition, establishment, or continuance of intermediate or secondary schools or of centres of advanced technical instruction.

The education authority are required to establish a Local Advisory Council "consisting of persons qualified to represent the views of bodies interested in education, for the purpose of advising the authority on matters of educational interest relating to the education area." They

are represented on the governing bodies of central institutions, and they elect the National Committee for the Training of Teachers, and are represented on the Provincial Committees. They may also be represented on the governing bodies of schools not under their own management, to the maintenance of which they make contributions.

III. The School System

The Education (Scotland) Act of 1872 was not an Act for the provision of elementary education only, though it did not compel the parent of a child to go beyond this. In many of the parish and burgh schools which were transferred to the School Boards by the Act, groups of pupils, or individual pupils, of sufficient capacity had continued their studies until they were qualified to enter the University. The Act required the School Boards to maintain the efficiency of the schools transferred to them, and laid upon the Scottish Education Department the duty of securing that the standard of education which then existed in the public schools should not be lowered, and that, as far as possible, as high a standard should be maintained in all schools inspected by the Department. There was a distinction in the Act between schools in which the instruction was chiefly elementary, and those where it was mainly in Latin, Greek, modern languages, mathematics, natural science and the higher branches of knowledge ; but there was no limitation to elementary education in any of the schools, and the distinction between primary and secondary schools has never been very definitely made. The first Code of the Scottish Education Department, applicable to schools in which the instruction was chiefly elementary, made provision for a three-year course in English, mathematics, Latin, Greek, French, German and natural science. It may be said, in fact, that the purely primary school is unknown in the educational statutes of Scotland, and where it exists, is the result of administrative organisation to meet the circumstances of the district.

The Act of 1872 authorised the School Boards to establish infant schools, but the separate school for infants has always been exceptional in Scotland. The Code provides that the normal organisation of a school should be (*a*) an Infant Division providing instruction suitable for children under 7 years of age ; (*b*) a Junior Division providing instruction suitable for children between the ages of 7 and 9 ; (*c*) a Senior Division providing instruction suitable for children between the ages of 9 and 12 ; and (*d*) an Advanced Division providing instruction suitable for scholars over 12 years of age.

Children under School Age

The Education (Scotland) Act of 1918 empowered Education Authorities to make arrangements for supplying or aiding the supply of nursery schools for children over 2 and under 5 years of age whose attendance at such schools is necessary or desirable for their healthy physical and mental development, and attending to

reasonable standard of attainment in elementary subjects. There is no limitation as to age of promotion, though the age in Scotland is normally 12; and, subject to the Department's approval of the arrangements, the Education Authority are left to devise their own methods of ascertaining whether a pupil is qualified to proceed beyond the primary stage. The Education Authority have a similar initiative, subject to the same approval, as regards the "suitable subjects" of post-primary instruction; and, as it is clear that the same group of subjects would not be suitable for all pupils who had satisfactorily completed the work of the Senior Division, it would appear to follow that the Education Authority are entitled to determine, as the result of their approved tests, to which school providing suitable subjects for the particular pupil he should go. The pupil's claim to Intermediate and Secondary education without payment of fees would not, therefore, appear to confer a right to such education in a particular school, or a particular group of subjects, if the Education Authority determine in accordance with their approved scheme of promotion that he can be more suitably provided for otherwise.

The "day schools" in which Intermediate and Secondary education must be provided are defined in the Acts as schools, or departments of schools, conducted in accordance with the Code of Regulations, or providing a curriculum approved by the Department under the Secondary Schools Regulations. The great majority of the pupils receiving post-primary instruction in Scotland are in attendance at these schools; but it may be noted also that all the principal private and endowed schools not covered by this definition, in which such instruction is given, submit themselves to the inspection of the Department as provided by the Acts; and that, as they also present pupils for the award of the Leaving Certificate issued by the Department, they are required to submit their general curricula and schemes of study in each subject for approval, as a condition of such presentation. It may be said, therefore, that the whole of the post-primary instruction in Scottish schools comes under the survey of the Department.

Of the pupils who left the "Primary" schools and the Primary Departments of schools conducted under the Secondary Schools Regulations during the year ended July 31st, 1932, 8,414 had failed to reach the standard of attainment held to qualify for entry upon a post-primary course. Under the approved schemes of promotion of the Education Authorities, however, many of these pupils had been receiving special instruction of a practical kind for some time before reaching the age of 14. This is also true in the case of 1,374 pupils who had reached the qualifying stage before leaving but had not actually been enrolled in an approved Advanced Division. The formal approval of an Advanced Division course may have been withheld on account of some defect in the accommodation or equipment of a rural school, though the instruction given was not the less effective in many respects. 4,757 of the

pupils leaving during the year had been enrolled in an approved Advanced Division for less than one session, and 13,095 for at least one session but less than two. There were 16,020 pupils who had completed two or more sessions in the Advanced Division; and during the year 33,896 were transferred to Secondary Schools or Departments. Of the 26,788 pupils who left the Secondary Departments or Advanced Divisions of schools conducted under the Secondary Schools Regulations during the year, 1,858 had failed to complete one year of post-primary instruction; 6,670 had completed one year but not two; 7,050, two years but not three; 5,346, three years but not four; 1,654, four years but not five; 1,918, five years but not six; and 2,292 had completed the sixth or a subsequent year. A calculation based on these figures shows that, of the pupils who left the day schools of all kinds during the year, 48·7 per cent. had attended a post-primary course for not less than two sessions, 28·0 per cent. for less than two sessions but not less than one, and 23·3 per cent. for less than one session or not at all.

Of the 2,924 schools conducted under the Day School Code, about 58 per cent. have approved courses of post-primary instruction of not less than two years' duration, and in 233 of these the course extends to three years, and has been approved for purposes of the Higher Day School Certificate. The schools conducted under the Secondary Schools Regulations number 251, and in addition to these a number of schools not in receipt of grant from the Department, including schools under private management, as well as endowed schools under boards of governors, were examined during the year by the Department in accordance with the provisions of section 19 of the Education (Scotland) Act, 1878. The number of schools from which candidates were presented for the Leaving Certificate was 213.

The Advanced Divisions

There were 72,906 pupils enrolled in the post-primary Departments of schools conducted under the Day School Code on July 31st, 1932, of whom 57,165 were of school age: 3,268 of these pupils were still under the age of 12, and 15,741 were over 14. It is obvious that the period during which these pupils are able to take advantage of the instruction provided in the Advanced Division must vary considerably according to individual circumstances; and the Code provides, therefore, for post-primary courses of one, two and three years' duration. It may be noted, however, that certain of the schools conducted under the Code carry individual pupils beyond this stage, and present them in due course for the award of the Leaving Certificate.

It is laid down in the Code that the first and principal aim in framing courses of instruction for the Advanced Divisions must be the continuance and development of general education on the moral and physical, no less than on the intellectual, side. It is therefore

held to be essential that every course should provide for training in morals and citizenship, for music, and for physical exercises. The main instruments of intellectual training are to be the English subjects, together with mathematics and science, and, as a rule, drawing. These should accordingly be studied throughout the course, the amount of detail varying with the length of the course. General provision of this kind having been made for all, account is to be taken of local conditions, and of the needs and aptitudes of individual scholars, to such extent as the circumstances of each school may require, and its resources permit. Every course will thus consist of an appropriate combination of subjects, and will have a character of its own. That character may be allowed to colour the treatment of the individual subjects included in the course. Mathematics and science, for instance, may mean one thing for boys in a sea-board school, and quite another for girls in one of the large cities. Similarly, if a foreign language is attempted, the treatment of it may vary according to the broad purposes of the course, and may often with profit be wholly or mainly directed towards the acquisition of a reading knowledge of the language, and some acquaintance with the institutions of the country concerned. A course for pupils who are not likely to remain in the Advanced Division for more than a year should provide instruction in English, history and geography, mathematics (or for girls, arithmetic) and science, and one or two of the following subjects: (*a*) drawing; (*b*) practical subjects (e.g. technical drawing, benchwork; navigation; gardening; needlework (especially mending, darning and cutting-out), dressmaking; cookery, laundrywork); (*c*) commercial subjects (a beginning); (*d*) a foreign language. For pupils who are expected to complete two but not three years in the course, the instruction in these subjects should be extended accordingly. In the case of pupils who will remain for three years in an Advanced Division, graduated courses of instruction should include the following:

(1) English, history and geography.
(2) Mathematics and science.
(3) Drawing.
(4) One or more of the following:

(*a*) practical subjects, e.g.—
technical drawing, benchwork, mechanics;
navigation, seamanship;
gardening, agriculture, dairying;
needlework, design, dressmaking;
cookery, laundrywork, housewifery:
(*b*) commercial subjects:
(*c*) a foreign language:
(*d*) any other approved subject.

It will be seen that the regulations allow for the provision of very varied courses of instruction adapted to the needs of the pupils and the circumstances of the locality; and it may be noted that in some cases Advanced Divisions are also established in schools

conducted under the Secondary Schools Regulations, and that the first three years of the courses of instruction approved for such a school may be accepted for the purpose of presentation for the Higher Day School Certificate.

The Secondary Schools

There were 83,180 pupils on the registers of the Secondary Departments of schools conducted under the Secondary Schools Regulations on July 31st, 1932. Of these, 40,290 were of school age, 1,977 being under 12 years old. The average enrolment for the year was 86,188, of whom 33,448 were in the first year of the course, 23,068 in the second, 14,143 in the third, 7,345 in the fourth, 5,086 in the fifth, and 2,898 in the sixth year or beyond. It has been noted that during the year 33,896 pupils were transferred from schools conducted under the Code to Secondary Departments, but not all of these were entering the first year. A considerable number of such pupils are transferred to a Secondary School after completing one or more years of the post-primary course in the school they first attended. It may be observed also that in a number of the schools conducted under the Secondary Schools Regulations, mostly situated in rural villages where the attendance does not justify the provision of a full secondary course, the curriculum extends over three years only, individual pupils who wish to proceed beyond this stage being transferred to a larger centre.

The subjects of a secondary course must normally be taken from the following list:

(1) English (including literature and history):
(2) Mathematics. Science: any approved combination of—physics, chemistry, botany, zoology, geography, an applied science, e.g. engineering, agriculture:
(3) Latin, Greek, French, German, Italian, Spanish, Gaelic:
(4) Art, music, commercial subjects. Domestic subjects: any approved combination of—cookery, laundrywork, housewifery, needlework, dressmaking, design and embroidery, allied art or science;

and any other subject specially approved beforehand by the Department with reference to the particular curriculum for which it is proposed.

English (with literature and history) and, as a rule, a language other than English should be studied throughout. Mathematics (including arithmetic), science (including practical work), geography and, normally, art ought to find a place in every curriculum, although they need not always be studied throughout. In each year, suitable provision should be made for physical education, and music should be taken at least as a recreative subject.

A secondary course which does not conform to the normal requirements may, however, be submitted for the approval of the Department where, in the opinion of the school authorities, the interests of a particular pupil or group of pupils would best be served otherwise.

Examinations and Certificates

The question of the standard of qualification for post-primary instruction has been dealt with above. The Code provides for the issue by Education Authorities of a Lower Day School Certificate to pupils who have satisfactorily completed a course of instruction in the Advanced Division extending over two years ; and for the issue by the Department of a Higher Day School Certificate to pupils who have satisfactorily completed a three-years' course. Candidates for the Higher Day School Certificate are required to be presented for examination in not less than four subjects, though other subjects may find a place in the curriculum. All candidates must be presented in :

(*a*) English with history and geography :
(*b*) arithmetic :
(*c*) the characteristic subject of their course, viz. :
in literary courses : a foreign language ;
in commercial courses : penmanship, book-keeping and shorthand, with typewriting, or (for boys) business procedure ;
in technical courses for boys : benchwork, technical drawing and mechanics, or (in sea-board schools) navigation and seamanship ;
in technical courses for girls : cookery, laundrywork and needlework with dressmaking ;
in literary courses, and technical courses for boys, geometry and algebra, and, in commercial courses, algebra must be offered in addition to arithmetic ;
(*d*) the fourth subject may be science (pure or applied) or art, or crafts ; or it may be selected from among the subjects named above if not already professed.

The certificate is awarded on the recommendation of His Majesty's Inspector on consideration of the school record of the pupil, the teachers' estimates of his attainments and such further investigation as may be considered desirable. A short written paper common to all candidates is set by the Department, as a test of the general intelligence of the candidates and their power of comprehending and using English.

The Department's Leaving Certificate is issued to pupils who have satisfactorily completed a well-balanced course of secondary education extending over five or six years suitable for pupils who leave school at 17 or 18 years of age. The award is determined by the school record of the pupil, and by the result of such written, oral and practical examination as the Department may decide to hold. Candidates must be presented to the Inspectors of the Department for such examination—individual or collective—in all the subjects of study. While the award of the certificate is not determined by the number of passes obtained, candidates must be presented for examination and will normally be expected to pass on the Higher standard in at least two subjects (of which English must be one) and on at least the Lower standard in two others. No certificate will be issued except on satisfactory evidence of the successful completion of the course as a whole. This condition

does not, however, preclude pupils who have qualified for the award of the certificate at the end of a regular Secondary course from returning to school for further specialised instruction and taking the appropriate examinations. The certificate is the normal passport to the university for Scottish pupils, the passes entered thereon being accepted in lieu of the preliminary examinations of universities and professional bodies on certain conditions.

Continuation Classes and Central Institutions

The Continuation Class Code provides for the organisation of suitable classes or courses of instruction for pupils who have left the day school, from preparatory classes to courses approximating to the university standard. The preparatory courses are intended for those pupils who leave the day school before reaching the standard of the Lower Day School Certificate, who are ineligible for enrolment in a more advanced course until they have received some preliminary instruction. A preparatory course includes English subjects, arithmetic, physical education and some introductory study of the subjects to be afterwards continued in the more advanced classes.

The more advanced classes include :

(1) Classes in single subjects, or groups of classes in related subjects, extending over one session, for pupils who are unable to take advantage of the more fully organised courses.
(2) Organised courses of four or more years' duration in any subject, or related groups of subjects, appropriate to the needs of the locality. In the first two years of these courses some study of English subjects and, where practicable, physical education are provided for, and the rest of the work may be partly vocational or wholly non-vocational. The standard of admission to the first year of these courses is the Lower Day School Certificate, and holders of the Higher Day School Certificate may be enrolled in the third year of the course. These courses are affiliated to the appropriate Central Institution.
(3) Classes for adults in the subjects of a liberal education suitable for persons over 18 years of age, including (*a*) classes of a tutorial nature extending over at least two sessions, in which the work done, within the limits of the subjects and the time taken, approximates to the university standard, and (*b*) courses of lectures in which the ground is covered in a single session.

The various subjects of instruction under (2) and (3) naturally arrange themselves into six groups :

(1) Technical and industrial (engineering, building, chemistry, mining, navigation, textiles, trade courses, etc.).
(2) Commercial and literary.
(3) Domestic science and arts.
(4) Art and art crafts.
(5) Music.
(6) Agriculture and rural industries.

There is a Central Institution for higher technical education in each of the four great centres of population and industry in Scotland :

Edinburgh, Glasgow, Aberdeen and Dundee. These institutions are of university rank at their higher stages, and actually function as technical universities. In some cases university students attend the technical college laboratories and lecture rooms for part of their courses, while similar advantages are offered by the university to the students of the technical college, the students from both institutions working side by side in the laboratories, and attending the same lectures. University degrees are conferred on technical-college students who fulfil the prescribed conditions, and the technical-college full-time day course diplomas and associateships approach and, where the courses are of equal duration, reach the standard of the university degree. The Central Institutions constitute educational centres with which all the continuation classes in their provinces are correlated, either directly, or, in the case of the more elementary and outlying classes, through the continuation-class centre to which they are tributary. Every continuation class in Scotland is thus definitely linked to one or other of the Central Institutions, so that there is a clear and well-defined path from the preparatory continuation class in the village school, through the continuation-class centre, to the Central Institution and the university, facilities being afforded in the Central Institutions for transference from evening to day classes.

Financial Assistance to Pupils

Every Education Authority in Scotland is required to submit, for the approval of the Department, a scheme for the exercise of their powers to facilitate attendance at secondary schools and other institutions, by the payment of travelling expenses, or of fees, or of the cost of residence in a hostel, or of a bursary or maintenance allowance, or any combination of these forms of assistance, with a view to securing that no child or young person who is qualified for attendance at an intermediate or secondary school, a university, a training college, or a central institution, shall be debarred therefrom by reason of the expense involved. During the financial year ended May 15th, 1932, the total sum so expended was £244,000. This sum was divided as follows :

(1) Pupils in the first three years of a post-qualifying course	£64,000
(2) Pupils in the fourth, fifth or subsequent year of such a course	£48,000
(3) Students at universities, training colleges and central institutions	£132,000

In addition, considerable sums were awarded to students from funds administered under the Educational Endowments (Scotland) Acts.

[Contributed.]

Statistics

TABLE 22

SCOTLAND: AGE AND NUMBER OF PUPILS ON THE REGISTERS AT THE END OF THE SCHOOL YEAR, 1931-2

AGE	PRIMARY SCHOOLS	SCHOOLS CONDUCTED UNDER THE SECONDARY SCHOOLS (SCOTLAND) REGULATIONS, 1923		SPECIAL SCHOOLS AND CLASSES	SIDE SCHOOLS	TOTAL	CONTINUATION CLASSES
		PREPARATORY DEPARTMENTS	SECONDARY DEPARTMENTS (INCLUDING ADVANCED DIVISIONS)				
Under 5	3,107	284	—	14	8	3,413	
5 and under 6	56,621	5,950	—	318	67	62,956	
6 and under 7	76,413	8,528	—	685	77	85,703	
7 and under 8	76,005	8,717	—	879	106	85,707	
8 and under 9	77,499	9,502	—	1,092	116	88,209	
9 and under 10	76,727	10,088	—	1,154	105	88,074	
10 and under 11	81,229	10,928	38	1,307	101	93,603	
11 and under 12	81,249	11,334	1,939	1,395	101	96,028	
12 and under 13	76,998	8,149	16,212	1,571	82	103,012	
13 and under 14	45,013	2,305	22,101	1,019	50	70,488	Under 15
14 and under 15	16,462	642	16,694	790	28	34,616	17,857
15 and under 16	2,177	81	11,030	564	1	13,853	}
16 and under 17	429	5	7,485	234	—	8,153	} 56,184
17 and under 18	58	3	4,580	35	—	4,676	}
18 and over	32	—	3,101	5	—	3,138	91,244
Total on Registers	670,029(a)	76,516	83,180	11,062	842	841,629	165,285
Total of School Age (5–14)	647,764	75,501	40,290	9,420	805	773,780	
NUMBER OF SCHOOLS AND AVERAGE NUMBER OF PUPILS ON REGISTERS							
Number of Schools	2,924	(208) (b)	251	(55) 55 (b)	(160) (b)	3,230 (c)	
Average Number on Registers	663,735	74,826	86,188	10,759	880	836,388	

CENTRAL INSTITUTIONS FULL-TIME	
ONE SESSION	LESS THAN ONE SESSION
3,012	1,995

PART-TIME	
DAY	EVENING
3,609	11,139

TEACHERS' TRAINING CENTRES		
MEN	WOMEN	TOTAL
379	1,222	1,601 (d)

UNIVERSITIES				
FULL-TIME		PART-TIME		
FIRST DEGREE OR DIPLOMA	ADVANCED	FIRST DEGREE OR DIPLOMA	ADVANCED	OCCASIONAL
11,072	203	408	203	2,036

(a) *These figures include 72,906 pupils in post-primary departments.*
(b) *These are departments or classes.*
(c) *Exclusive of figures in brackets.*
(d) *These figures are for 1932–3.*

TABLE 23

SCOTLAND: SUMMARY OF THE NUMBER OF TEACHERS RECOGNISED UNDER THE VARIOUS SECTIONS OF THE REGULATIONS FOR THE TRAINING OF TEACHERS WHO WERE EMPLOYED ON MARCH 31ST, 1931, IN THE VARIOUS GRADES OF SCHOOLS

1.	2.		3. CHAPTER V (SPECIAL CERTIFICATE)				4. CHAPTER VI (TECHNICAL CERTIFICATE)				5.		6.		7.		8.	9.		10.
	CHAPTER IV (GENERAL CERTIFICATE) (EXCLUSIVE OF NUMBERS IN COLUMNS 3(*a*) AND 4(*a*))		(*a*) ALSO RECOGNISED UNDER CHAPTER IV		(*b*) NOT RECOGNISED UNDER CHAPTER IV		(*a*) ALSO RECOGNISED UNDER CHAPTER IV		(*b*) NOT RECOGNISED UNDER CHAPTER IV		CHAPTER X ARTICLE 71 ("ASSISTANT TEACHERS")		CERTIFICATED TEACHERS OF THE BLIND OR DEAF (ARTICLE 32)		TOTAL		GRAND TOTAL	GRADUATES OF A RECOGNISED UNIVERSITY (INCLUDED IN PREVIOUS TOTALS)		PERCENTAGE OF 9 TO 8
TYPE OF SCHOOL	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		MEN	WOMEN	
Primary Schools . .	3,330	14,616	556	136	24	34	59	22	190	388	—	23	—	—	4,159	15,219	19,378	2,253	2,821	26·2
Schools conducted under the Secondary Schools (Scotland) Regulations, 1923	480	2,314	1,609	693	336	417	39	31	334	460	—	4	—	—	2,798	3,919	6,717	2,309	1,860	61·8
Special Schools and Classes for Blind, etc., children	28	508	—	5	—	—	—	1	8	8	—	1	8	19	44	542	586	11	48	10·3
Employed in more than one school . . .	48	341	33	27	2	5	23	8	356	693	—	1	—	—	462	1,075	1,537	96	211	19·9
Totals . .	3,886	17,779	2,198	861	362	456	121	62	888	1,549	—	29	8	19	7,463	20,755	28,218	4,669	4,940	34·0

TABLE 24—SCOTLAND: UNIVERSITY STUDENTS, 1931–2

INSTITUTIONS	FULL-TIME STUDENTS		PART-TIME STUDENTS		STUDENTS TAKING COURSES NOT OF A UNIVERSITY STANDARD	STUDENTS ATTENDING EXTRA-MURAL CLASSES	GRAND TOTAL
	MEN	WOMEN	MEN	WOMEN			
Aberdeen University .	789	390	59	14	234	250	1,736
Edinburgh University .	2,558	1,117	519	56	—	1,282	5,532
Glasgow University .	3,425	1,570	470	28	—	1,201	6,694
Glasgow Royal Technical College . . .	353	22	2,128	51	1,052	[illegible]	3,604
St. Andrews University, including Dundee University College . .	549	299	75	47	2	800	1,772
Total . .	7,674	3,398	3,251	196	1,288	3,533	19,338

CHAPTER FOUR

NORTHERN IRELAND

I. Governing Enactments

THE Government of Ireland Act, 1920.—Under the powers conferred on the Government of Northern Ireland by this Act, the Ministry of Education was established in 1921. The education services in Northern Ireland, previously administered by the Dublin Boards as part of the Imperial Irish System, were transferred to the Ministry in February 1922.

The Education Act (Northern Ireland), 1923, constituted the Council of each of the six counties and two county boroughs as education authority for its area, acting through regional or borough education committees, with powers to provide, when necessary, and assist in the supply of, facilities for elementary, secondary and technical education, and to deal with compulsory school attendance, medical and dental inspection, the care of afflicted children, etc.

The Act in its broad lines followed the main principles of English legislation, with modifications to meet the special conditions. Amongst other far-reaching changes it completely reorganised the system of grants to secondary education.

The Education Act, 1930, empowered the Minister of Education to add members to these committees to represent the transferors of schools to the extent of one-fourth of the total membership of the committee. This amendment was introduced to conciliate the demands of the Churches. The nomination of transferors of schools to these committees and also on school management committees secured that the religious interests which had previously managed the schools were able to retain a controlling influence in the new administration.

II. Administrative System

The Ministry of Education

The Minister of Education has hitherto represented the Government in the Senate, of which he is the leader, and holds Cabinet rank. The permanent staff is under a secretary and two assistant secretaries, one for elementary and one for higher education, assisted by an executive of about 130 individuals. The outdoor staff comprises a senior chief inspector, two chief inspectors, twenty-four senior and district inspectors and five organisers. The Ministry supervises and inspects the schools, pays directly the whole of the salaries of elementary teachers, and contributes through the education authorities and governing bodies the " incremental

portion," as it is styled, of the salaries of secondary and technical teachers. The organisation, curriculum to be followed and working of the schools are regulated directly by the Ministry, to a very close extent in the elementary schools, and with more freedom to the school conductors in the others. The Ministry also maintains a training college at Belfast for elementary teachers. While administration is much more centralised than in Great Britain, the tendency is towards a growing devolution of responsibility to the newly established education authorities.

The Local Education Authorities

The statutory education authorities are the councils of the two county boroughs, Belfast and Londonderry, and of the six counties, so that they are eight in number. Except in regard to the raising of rates and loans, the acquisition of land and the general control of expenditure, the powers and duties of these authorities are discharged, in the boroughs, by education committees appointed by the councils and, in the counties, by regional education committees, appointed either for the whole county or for conveniently sized divisions of the county. The members of these regional committees are appointed partly by the county councils and partly by the Urban and Rural District Councils of which the county is composed, together with a small number of representatives of transferors of schools nominated by the Minister.

The counties of Armagh, Down and Fermanagh are counties with a single regional committee; the other three counties are divided into thirteen regional areas, each with a separate committee.

Elementary Education.—The compulsory ages are from 6 to 14. The education authorities are responsible for the provision of sufficient school-places for all the pupils. They can build or aid in the building of new schools when necessary and they manage and maintain schools provided by them or existing schools transferred to them by voluntary managers. They contribute half the cost of heating and cleaning voluntary schools, and may also contribute towards maintenance and equipment of any voluntary schools which are managed by a statutory committee on which the authority has representation. They have no responsibility for the payment of teachers' salaries. They can provide school-books and equipment for practical instruction for all classes of elementary schools, as well as the cost of locomotion where children reside at an inconvenient distance from the nearest school. The authorities do not prescribe the curriculum or regulate closely the working of the schools, these matters resting almost entirely with the Ministry.

Secondary Education.—It is the duty of the authorities to promote the supply of secondary education in their areas, but as such education is nearly everywhere in the hands of boards of governors of endowed and private schools, the main efforts of the new authorities have been concentrated on the provision of scholarships and free

places. In only five localities has any authority found it necessary to maintain a secondary school. Several authorities have made special grants to aid school governors to improve their buildings or to pay off debt incurred for that purpose, and in these cases the authority has received representation on the governing body and free places have been placed at its disposal for county scholarships. The Act of 1930 allows authorities to maintain boarding schools, but only in such a way as not to throw the cost on the rates.

Technical Education.—Technical instruction is administered by the education authorities to a much greater extent than the other grades of education. The technical schools (except three under voluntary management) are managed and controlled by the authorities, who select the courses taught, appoint the teachers, and see to the finance with the help of certain grants from the Ministry.

III. The School System

Elementary Education

The typical public elementary school is an " all-age " school for children from 4 or 5 to 14 years of age. Of recent years the tendency has been to merge " infant " schools with schools for older children and amalgamate separate boys' and girls' schools. In Belfast and some urban districts the education authorities are building " senior " schools for pupils over 10 years of age and grouping round them " junior " schools for children from 4 to 10 years. Of 1,832 elementary schools in operation on December 31st, 1932, only 31 were " infants' " schools, and 280 were separate boys' or girls' schools, the remainder, 1,521, being mixed schools. Of the latter, there were 10 " senior " schools (all new buildings), with 6,164 places, and 50 " junior " schools. In late years, with the institution of the local education authorities, much amalgamation of schools has been effected, over 230 schools having been closed, and the average enrolment of the schools is increasing.

Schools controlled by local education authorities number 553, with an enrolment of 85,961 children. These schools are attended by all religious denominations except Roman Catholics, and religious instruction on an undenominational programme is given in them for one half-hour daily to all pupils whose parents do not object.

Voluntary schools under Roman Catholic management number about 750 and contain one-third of the pupils. There are over 500 schools still not transferred under Protestant voluntary management, with about 45,000 pupils, but the process of transfer of these schools is proceeding, slowly but steadily. In transferred schools teachers are appointed by the education authorities from a " short list " of three names selected by the school management committee of the school concerned : three-fourths of the members of the latter body are representatives of the former managers and parents, so that local interests have effective control in the choice of teachers.

Teachers consist of principals and assistants, of whom nearly 90 per cent. have been trained in recognised training colleges. In small schools under 50 pupils there is a class of junior assistant teachers recognised, without training qualifications. Schools of 50 are entitled to a trained assistant, and an additional assistant is recognised for every 45 pupils in average attendance. Very large schools are staffed somewhat more liberally.

An official programme of instruction issued by the Ministry is followed in all schools, to which, however, modifications may be permitted. The ordinary curriculum includes English (oral and written), arithmetic, geography, singing, drawing, physical training, needlework and domestic economy (girls) and handwork (boys). Optional and extra subjects (for which grants are paid by the Ministry) comprise history, elementary science, nature study, algebra, geometry and horticulture. The study of horticulture has much increased in recent years. Extra fees were paid for the teaching of Irish, but the grant has now been withdrawn.

The large number of rural schools with only two teachers has made it necessary to devise special methods of organisation, and in such cases the " bipartite system " is adopted. The junior teacher takes charge of infants and first and second standards, the principal taking the third, fourth, fifth and higher standards. Each group is divided so that one portion does some written or silent exercise seated in desks, while the other stands out before the teacher for some oral instruction. In this way all pupils are kept employed simultaneously without the loss of efficiency due to the presence in the same class of pupils of widely differing ages and attainments.

Schools are officially inspected at regular intervals, annually in schools whose progress is below normal, and biennially or triennially in other schools. Inspections include examination tests as well as observation of methods of teaching, and the general efficiency of each member of the staff is assessed and recorded. In 1932 " highly efficient " teachers numbered 32·7 per cent., " efficient " 65·5, whilst less than 1·8 per cent. fell below this standard. Appeals against inspectors' assessments are heard by a Teachers' Rating Appeal Committee.

Pupils are classified in eight standards, with promotion normally at midsummer in each year. The enrolment in the higher standards shows a marked progressive increase, the numbers enrolled in sixth standards and above having gone up from 21,772 in 1927 to 30,524 in 1932. A public examination of pupils in seventh standard, known as the Elementary School Leaving Certificate Examination, is held annually : in 1932, 3,108 pupils took this examination, of whom 2,681 passed, 1,442 with honours. Every year about 22,000 pupils pass out of the elementary schools, of whom about 5,000 are known to continue their education at secondary or technical schools. The standard of attainment by the leavers is steadily rising.

The building of new schools is proceeding fast all over the province. The older schools are generally obsolete in planning, and many of them unsuitable and in bad repair, but they are being replaced in large numbers by up-to-date buildings which compare favourably with school premises in any part of Great Britain. The sums spent by the education authorities in school building since 1923 amount to nearly £700,000.

Secondary Education

The secondary schools of Northern Ireland, with very few exceptions, observe the rules and regulations of the Ministry of Education, with the result that they tend to follow similar programmes of instruction and approximate to the same standards. In the reorganisation of secondary education that followed the Londonderry Act of 1923, all these schools conformed to the conditions for earning the grants, which are of two kinds : (1) a capitation grant, and (2) a grant in aid of salaries, known as " increment " grant. Private or proprietary schools are ineligible for Government aid, and it is a condition of grants that all the school income must be spent on the school and the accounts audited by the Government auditor. Apart from the grants from the Ministry, which approximate in value to about £12 3*s*. per pupil on rolls, the income of the schools consists of (1) pupils' fees, varying (for day scholars) from £9 or £10 to £18 or £20 ; and (2) endowments, which, except in a few older foundations, are very moderate in amount. Aid is also received from the local education authorities in some cases towards building improvements or exceptional expenditure.

The secondary-school course is organised normally in two divisions : (1) the three-years' intermediate course, from 12 or 13 to 15 or 16 years of age, leading to the Junior Certificate Examination, and (2) the post-intermediate course of two years, culminating in the Senior Certificate. The rates of capitation grants for pupils in the two divisions are £9 and £12 respectively. There are also preparatory courses recognised in most schools for pupils from 6 to 12, and a capitation grant of £5 is paid for such pupils. Preparatory pupils are not eligible for enrolment unless they pay a minimum fee of £6, and the course of study must be arranged so as to prepare the pupil for secondary-school work proper. Passage from each of the three courses to the one above is determined by tests applied by the teachers, subject to check by the Ministry. Of 73 secondary schools in operation 61 had preparatory departments, with 2,700 pupils. Pupils following intermediate courses numbered 6,813, and the number in post-intermediate courses was 2,826, a slight increase on the previous year.

All secondary teachers must possess qualifications approved by the Ministry, normally an Honours degree in the branches taught, and satisfy a probationary test from the Ministry's inspectors. In 1932, 706 full-time and 278 part-time teachers were employed, three-fifths approximately being women.

The curriculum followed in the schools is influenced very greatly by the requirements of the two public examinations held by the Ministry, the Junior and Senior Certificate Examinations. The minimum course of study for Junior Certificate comprises English, history, geography, two second languages (French nearly always, Latin in most boys' schools, Irish in Roman Catholic schools), mathematics and elementary science. Drawing, domestic economy, singing and physical training are usually taken, and practical instruction is being increasingly provided for. The same subjects are found in the programme for the Senior Certificate, but with increasing specialisation. About 3,000 pupils annually take the examinations, one-third of whom take the Senior papers.

Notwithstanding the uniformity of the official organisation of secondary education, secondary schools show, as in Great Britain, many different types. Besides three or four large boarding schools, of " public-school " standing, there are well-equipped day and boarding schools (some of ancient foundation) in most urban centres. Roman Catholic secondary education is carried on in 17 convent schools, 5 Christian Brothers' schools (for boys) and 5 Diocesan Colleges.

Technical Education

A very comprehensive and well-organised system of technical education is in existence over the whole area of Northern Ireland. Having been commenced under the Department of Technical Instruction, which was established by the Agricultural and Technical Instruction (Ireland) Act, 1899, the technical schools and centres were in 1924 transferred to the control of the new local education authorities set up by the Londonderry Act of 1923, except in the case of the urban centres of Armagh, Bangor, Newry and Larne, which retained their autonomous powers for technical instruction. Under the new system larger funds are available for technical instruction and the schools have greatly developed in extent and importance.

At the apex of the system is the Belfast Municipal College of Technology, affiliated to the Queen's University, and having an enrolment of about 10,000 students. Its special features are day courses of university standard in applied science and technology, leading to university degrees, a College of Art, and a training college for teachers of domestic economy ; the other features include a junior technical school for pupils from 13 to 16 years of age, day and evening courses for apprentices, and evening courses for juveniles and adults, in all descriptions of industrial and commercial pursuits.

In all the urban centres of Northern Ireland to the number of about 60 there are permanent technical schools, providing day and evening courses, the most numerously attended classes being in commercial subjects, pure and applied science, domestic science, mathematics, handicraft and art subjects. In addition to these

centres, itinerant classes are held at 65 centres for about 1,500 students, chiefly during the summer months. The total enrolment in technical schools and classes (including the Belfast College of Technology) was in 1931–2 22,569, a number practically the same as in each of the last five years.

There were 35 full-time junior day schools in operation during the past year, providing a general education for young persons proposing to take up employment in (1) commercial, (2) industrial, (3) agricultural and (4) household occupations. Of these schools for pupils from 13 to 16 years of age and upwards 22 were Day Commercial schools, with about 1,500 pupils, the other 13 being junior technical schools, with an enrolment of 900. The normal course is of two years with a leaving examination at the end, and may be extended to three. While the general aim of the curriculum is of a cultural character, two of the five subjects studied in these schools are of a practical nature with a vocational bias.

Apart from the junior technical schools the day students are of two grades : (1) those studying at the Belfast College for University degrees in co-ordination with Queen's University in engineering, textile technology, applied chemistry, architecture, and pharmaceutics ; and (2) apprentices, chiefly in the linen and shipbuilding trades, who usually attend one day a week (in some cases two) by arrangement with the employers. Some of these apprentices hold trade scholarships from the Ministry of Education and attend full time ; 80 such scholarships, which provide college fees and maintenance allowances, are awarded annually and are keenly competed for. More valuable scholarships for intending technical teachers and also for research work are awarded by the Ministry each year.

The technical schools are widespread and popular all over Northern Ireland, and in many places they act as a rallying-ground for all educational movements in their districts.

[*Contributed.*]

TABLE 25—NORTHERN IRELAND

(i) PUBLIC ELEMENTARY SCHOOLS

A

Classification by Class and Number of Schools, Accommodation, Average Number on Rolls, and Average Attendance on December 31st, 1932

CLASS OF SCHOOL	NUMBER OF SCHOOLS	ACCOMMODATION	AVERAGE NUMBER ON ROLLS	AVERAGE ATTENDANCE
1. Ordinary Public Elementary Schools	1,776	214,974	188,360	161,797
2. Other Public Elementary Schools:				
(*a*) Schools under Religious Orders:				
Convent	43	14,791	12,944	11,188
Monastery	6	1,620	1,584	1,387
Christian Brothers	7	2,461	2,372	2,146
(*b*) Special (Invalid and afflicted Children)	5	891	370	345
Total	1,837	234,737	205,630	176,863
CLASSIFICATION OF SCHOOLS BY GRADE				
Infants	31	5,595	5,750	5,011
Boys	138	20,951	21,046	18,386
Girls	142	25,936	24,192	20,726
Mixed	1,466	162,595	136,178	116,571
Junior[1]	50	13,496	12,887	11,191
Senior[2]	10	6,164	5,577	4,978
Total	1,837	234,737	205,630	176,863

[1] *As a rule, up to Third Standard only.*
[2] *As a rule, from Fourth Standard upwards.*

B

Pupils on Rolls on December 31st, 1932, according to Standards

	INFANTS	1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	TOTAL
Boys	23,361	13,220	13,595	14,041	13,679	12,566	9,600	5,046	435	105,543
Girls	21,448	12,183	13,054	13,392	13,215	12,458	9,658	5,324	461	101,193
Total	44,809	25,403	26,649	27,433	26,894	25,024	19,258	10,370	896	206,736

C

Trained and Untrained Elementary Teachers[1] *serving on December 31st, 1932*

	TRAINED			UNTRAINED			GRAND TOTAL
	PRINCIPALS	ASSISTANTS[2]	TOTAL	PRINCIPALS	ASSISTANTS[2]	TOTAL	
Men. .	1,052	481	1,533	22	20	42	1,575
Women .	695	1,894	2,589	24	385	409	2,998
Total .	1,747	2,375	4,122	46	405	451	4,573

[1] *Exclusive of junior assistant mistresses, of whom there were* 614 *serving on December* 31*st*, 1932.
[2] *Inclusive of lay assistants serving in schools paid by capitation grant.*

(ii) PREPARATORY, INTERMEDIATE AND SECONDARY SCHOOLS

D

Number of Schools and Pupils on Rolls on December 1*st*, 1932, *Classified according to Age*

AGE	PREPARATORY		INTERMEDIATE		POST-INTERMEDIATE		TOTALS		GRAND TOTAL (BOYS AND GIRLS)
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	
Under 12 years	923	1,269	108	115	—	—	1,031	1,384	2,415
12–13 ,,	142	105	475	433	—	—	617	538	1,155
13–14 ,,	67	50	864	748	1	—	932	798	1,730
14–15 ,,	24	22	999	936	23	18	1,046	976	2,022
15–16 ,,	12	7	664	648	293	171	969	826	1,795
16–17 ,,	5	1	284	321	543	369	832	691	1,523
17–18 ,,	—	2	102	122	414	388	516	512	1,028
18–19 ,,	—	1	20	29	215	223	235	253	488
Over 19 ,,	—	—	8	7	66	102	74	109	183
Total . .	1,173	1,457	3,524	3,359	1,555	1,271	6,252	6,087	
Combined Totals .	2,630		6,883		2,826		12,339		12,339[1]

[1] *These pupils were distributed over* 72 *schools,* 60 *of which had preparatory departments.* 18 *were boys' schools,* 30 *girls' and* 24 *mixed—schools in which children of either sex are admitted to the preparatory department alone not being regarded as mixed schools.*

CHAPTER FIVE

CANADA

(*See* YEAR BOOK, 1932, pages 662–84, 1933, 118–19, 440–61, 500–18, 519–26, 527–31, lxiii–v; and pages 281–93 and 547–606 of this volume)

BY the British North American Act, 1867, the control of education is vested in the provinces, subject to the limitation that the right to maintain separate schools, enjoyed under law by the religious minorities in any province, at the time that province entered the Dominion, might not be diminished by that province. With the exception, therefore, of certain restricted functions discharged by the Dominion Government, any summary of the Canadian educational system must be a summary by provinces.

I. DOMINION

Education in Dominion Territories

THE YUKON AND NORTH-WEST TERRITORIES

Population (1931): *Yukon*, 4,230; *North-West Territories*, 9,723

About 40 per cent. of the population in each of these Territories are native Indians. A further 40 per cent. in the North-West Territories are Eskimos. The Dominion Government's system of schools provides for the Indians in both Territories, as it does also for those in the provinces.

In the Yukon there is a public school system for white children. There were six schools with 242 children enrolled in 1931. The elementary pupils follow the Alberta programme, the secondary pupils write the Ontario examinations. There is no public school system in the North-West Territories, but grants for educational purposes are made by the Dominion Department of the Interior to the Roman Catholic and Anglican Churches, both of which maintain mission schools for white, Eskimo and Indian children. The Roman Catholic Church has three boarding schools and four without living quarters, the Anglican Church one and four.

Education of Indians

Administered by the Department of the Interior. In 1929 there were 341 Indian schools (129 in Ontario and Quebec, 22 in the Maritime Provinces, 177 in the Western Provinces, and 13 in the Yukon and North-West Territories) with an enrolment of 15,347 pupils. Of these schools 78 were residential. The Indian Act of 1919–20 introduced compulsory attendance for all children over 7 and under 15 years of age. The cost of Indian education to the Dominion Government in 1929 was $2,215,412.

Vocational Education

The Agricultural Instruction Act, 1913, provided for the distribution of $10,000,000 by the Dominion Government to the Provincial Governments for the encouragement of agricultural education. The Technical Education Act of 1919 provided for the distribution of a similar sum, over a similar period, in aid of technical instruction. The ten-year period was extended by five years in 1929, and in 1931 provision was made for a renewal of grants to a total of $750,000 a year for fifteen years. The administration of these funds is, however, in the hands of the Provincial Governments.

Research and Information

A National Council of Research makes grants for research and maintains the National Research Laboratories at Ottawa. The Dominion Bureau of Statistics acts as a clearing house for information and publishes the *Annual Survey of Education in Canada.*

II. PROVINCES

In view of the extent to which the provincial school systems are being affected by schemes for the reform of secondary education, we have thought it best to print a full description of those systems in immediate association with Prof. Clarke's study of secondary education in Canada in Section III of Part II. This description is contained in Chapter Sixteen of that Section.

E. P.

TABLE 26

CANADA: GRADE AND AGE DISTRIBUTION IN STATE-CONTROLLED SCHOOLS. SEVEN PROVINCES, 1930

(Omitting Quebec and British Columbia)

AGE	ELEMENTARY GRADES								
	KINDERGARTEN AND KINDERGARTEN PRIMARY	I	II	III	IV	V	VI	VII	VIII
4	—	204	—	—	—	—	—	—	—
5	6,303	7,548	45	2	—	—	—	—	—
6	16,726	62,643	4,236	216	9	—	—	—	—
7	6,677	88,253	30,509	4,294	460	16	—	—	—
8	1,748	46,495	58,556	25,430	7,661	532	29	5	—
9	449	18,431	39,961	42,007	36,605	7,794	738	68	3
10	130	7,178	18,566	28,590	49,192	35,037	7,633	812	143
11	61	2,900	7,487	13,944	31,793	43,431	27,632	6,557	1,302
12	23	1,542	3,271	6,339	17,102	31,536	38,322	24,112	8,422
13	13	797	1,535	3,139	8,787	18,200	28,700	33,130	25,809
Total 7–13	9,101	165,596	159,885	123,743	151,600	136,546	103,054	64,684	35,679
14	18	425	753	1,544	4,211	9,912	17,323	25,897	34,827
15	—	196	328	600	1,579	4,065	7,968	13,233	25,232
16	1	77	115	177	468	1,069	2,365	4,437	10,852
17	—	35	29	63	127	234	407	910	2,761
Total 14–17	19	733	1,225	2,384	6,385	15,280	28,063	44,477	73,672
18	—	18	19	23	30	61	82	155	571
19	—	25	13	36	40	39	61	56	174
Total	32,149	236,767	165,423	126,404	158,064	151,926	131,260	109,372	110,096

AGE	SECONDARY GRADES					TOTAL			
	IX	X	XI	XII	SPECIAL	UNCLASSIFIED	ELEMENTARY	SECONDARY	TOTAL
4	—	—	—	—	—	—	204	—	204
5	—	—	—	—	—	—	13,898	—	13,898
6	—	—	—	—	—	296	83,830	—	84,126
7	—	—	—	—	—	229	130,209	—	130,438
8	—	—	—	—	—	243	140,456	—	140,699
9	1	—	—	—	—	275	146,056	1	146,332
10	30	—	—	—	—	234	147,281	30	147,545
11	422	29	—	—	2	217	135,107	453	135,777
12	3,609	436	8	—	86	188	130,669	4,139	134,996
13	12,262	3,227	391	1	476	140	120,110	16,357	136,607
Total 7–13	16,324	3,692	399	1	564	1,526	949,888	20,980	972,394
14	21,090	10,336	2,926	41	1,051	74	94,910	35,444	130,428
15	20,517	16,274	8,730	617	1,379	33	53,201	47,517	100,751
16	11,243	13,836	13,684	2,464	814	5	19,561	42,041	61,607
17	3,981	7,173	10,742	4,397	544	—	4,566	26,837	31,403
Total 14–17	56,831	47,619	36,082	7,519	3,788	112	172,238	151,839	324,189
18	1,084	2,360	5,333	3,502	406	1	959	12,685	13,645
19	535	1,042	2,798	2,801	588	3	444	7,764	8,211
Total.	74,774	54,713	44,612	13,823	5,346	1,938	1,221,461	193,268	1,416,667

TABLE 27

CANADA: PRIMARY AND SECONDARY EDUCATION IN RELATION TO POPULATION

Provincial School Systems : Nine Provinces, 1931

—	CENSUS POPULATION 5–14		CENSUS POPULATION 15–19		PRIMARY GRADES TOTAL ENROLMENT (SCHOOL REPORTS)		SECONDARY GRADES TOTAL ENROLMENT (SCHOOL REPORTS)		PER CENT. OF SECONDARY ENROLMENT TO POPULATION 5–19	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Prince Edward Island .	9,571	9,394	4,632	4,272	8,027	7,362	710	1,178	5	9
Nova Scotia . . .	57,685	56,039	27,382	25,917	52,025	49,634	5,279	8,573	6	10
New Brunswick . .	49,380	47,745	21,943	20,906	40,086	39,597	1,947	2,787	3	4
Ontario . . .	330,357	320,842	163,315	155,573	285,598	269,605	50,011	53,309	10	11
Manitoba . . .	77,169	75,052	38,657	38,378	63,497	60,573	7,372	9,253	6	8
Saskatchewan . .	119,967	109,278	57,657	49,376	103,094	97,899	12,212	16,371	7	10
Alberta . . .	81,171	79,417	37,677	36,474	73,349	71,115	10,730	13,536	9	12
British Columbia . .	60,264	58,708	31,805	30,541	49,073	46,676	7,652	8,535	8	10

—	POPULATION 5–19		TOTAL SCHOOL ENROLMENT	
	MALE	FEMALE	MALE	FEMALE
Quebec	483,838	485,672	287,355	296,329
Total for Canada .	1,640,687	1,605,704	1,116,099	1,109,812

CHAPTER SIX

AUSTRALIA

(*See* YEAR BOOK, 1932, *pp.* 568–99, 584, 595; 1933, *pp.* 532–54, 462–75, *lxvi–lxxii*, *xci–vi*; *and pp.* 294–325 *of this volume*)

THERE is no Federal Ministry or Department of Education. Only the schools in the Northern Territory (six schools, including one High School with 319 pupils and one private school with 127 pupils) are under the direct control of the Commonwealth Government. Even the schools in the Federal district of Yass-Canberra are administered by the New South Wales Ministry of Public Instruction, the latter being recouped for expenditure from the Commonwealth Treasury. Each of the six Australian States is independent in educational matters and has a Ministry of Public Instruction or of Education (Tasmania) or a Department of Education with a Secretary (Queensland). There are no local authorities in the usual meaning of the term. There are Parents' Committees in Victoria and Queensland, School Committees in South Australia and Parents' and Citizens' Associations in Western Australia and New South Wales. These are local committees with no administrative powers. Finance is also provided wholly by the State Governments, without any Federal grants or local contributions.

In all States the age of compulsory attendance is 6–14. Education is free up to 14. Free places and scholarships are provided in high schools and private secondary schools. All public schools are secular, with right of entry.

Although the school systems of the six States are very similar, they vary in details and must be described separately.

NEW SOUTH WALES

Population : 2,528,000

New South Wales served as a model for other States and its system played an important part in the history of Australian education.

Pre-school education is provided in the public infant departments, which are either separate or parts of the primary schools. Free kindergartens receive grants. Ages usually 5–6.

Primary education is organised in six grades, ages 6–12, which serve as a basis for all post-primary schools.

Post-primary schools fall into five classes :

(i) *Superior or Continuation Schools*, four types : commercial, junior technical, domestic and rural. Three grades (VII–IX), ages 12–15.

(ii) *Intermediate High Schools*, usually three grades, but sometimes all five grades of the High School. Ages 12–15 or 17.

(iii) *District Schools*, usually four post-primary grades, ages 12–16.

(iv) *High Schools*, five grades, ages 12–17.

(v) *Senior Technical Colleges*, based on junior technical schools, ages 15–18 or up to 20.

There are primary and secondary private schools, the majority of them being Roman Catholic, but there are Protestant denominational and undenominational schools as well. Sydney Grammar School is endowed by the State and should be considered as public.

VICTORIA

Population : 1,805,000

Pre-school education is provided in public infant departments and free kindergartens receiving State grants. Ages 5–6. Primary education is organised in six grades, ages 6–12.

Post-primary schools fall into six classes :

(i) *Central Schools.* Usually two post-primary grades, ages 12–14. In exceptional cases all five post-primary grades.

(ii) *Higher Elementary Schools.* Usually four post-primary grades, ages 12–16; sometimes the fifth grade is included.

(iii) *Girls' Schools of Domestic Arts.* Usually three grades, ages 12–15, opportunity for two upper grades is given.

(iv) *Junior Technical Schools.* Usually three grades, ages 12–15, the fourth grade sometimes added.

(v) *High Schools.* Six post-primary grades, ages 12–18, majority of pupils staying five years.

(vi) *Senior Technical Colleges.* After junior technical schools, ages 15–18 or up to 20.

There are private primary and secondary schools.

QUEENSLAND

Population : 973,000

Pre-school education is provided in public preparatory grades and free kindergartens, ages 5–6. Primary education is organised in seven grades, ages 6–13.

Post-primary schools fall into six classes :

(i) *High Schools,* four grades, ages 13–17.

(ii) One *Commercial High School.*

(iii) One *Industrial High School.*

(iv) One *Domestic High School.*

(v) The *Technical Colleges* combine post-primary with post-secondary education. The Commercial, Industrial and Domestic High Schools are associated with these Colleges, as are also nine general High Schools.

(vi) Ten *Grammar Schools,* with State endowment, ages 13–18.

There are private primary and secondary schools.

SOUTH AUSTRALIA

Population : 586,000

Pre-school education is provided in infant departments of public primary schools and free kindergartens, ages 5–6. Primary education is organised in seven grades, ages 6–13.

Post-primary schools fall into five classes :

(i) *Higher Primary* combining seven primary grades with three secondary grades (I–X), ages 6–16.

(ii) *Central Schools,* combining five upper primary grades and three post-primary grades in three groups : home-making, commercial and technical. Grades III–X, ages 8–16.

(iii) *High Schools,* five secondary grades, VIII–XII, ages 13–18.

(iv) *Technical High Schools,* five grades, VIII–XII, ages 13–18.

(v) *Country Technical Schools,* post-primary, part-time.

There are private primary and secondary schools.

WESTERN AUSTRALIA

Population : 422,000

Pre-school education is provided in infant departments and free kindergardens. Primary schools cover all grades up to Grade XI, but very few stay after Grade VIII in the primary school, being usually transferred to high schools. Ages 6–14.

Post-primary schools fall into four classes :

(i) *Central Schools* are primary schools giving opportunity of post-primary education up to Grade IX, ages 12–15.

(ii) *High Schools,* five post-primary grades, ages 12–17.

(iii) *Preparatory Technical Classes*, three branches: commercial, industrial and domestic; ages 12–15, part-time.
(iv) *Technical College*, ages 15–18 or up to 20.
There are private primary and secondary schools.

TASMANIA

Population: 221,000

Pre-school education is provided in infant departments and free kindergartens. Primary education is organised in seven grades, ages 6–13.
Post-primary schools fall into three classes:
(i) *High Schools*, General, Commercial and Domestic. Five grades, ages 13–18.
(ii) *Junior Technical Schools*, three grades, ages 12–15.
(iii) *Senior Technical Schools*, ages 15–20.
There are private primary and secondary schools.

N. H.

Statistics

TABLE 28

AUSTRALIA: DISTRIBUTION OF SCHOLARS PER 100 PRIMARY PUPILS

STATE	PRIMARY	POST-PRIMARY	SENIOR TECHNICAL	UNIVERSITY	TOTAL POST-PRIMARY	% % IN PRIVATE SCHOOLS	TOTAL NUMBER OF SCHOLARS PER 10,000 INHABITANTS
N.S. Wales .	100	21	4	1	26	20	2,026
Victoria . .	100	17	6	1	24	22	2,063
Queensland .	100	7	5	0·5	13	15	2,283
South Australia .	100	16	8	2	26	17	1,940
Western Australia	100	16	6	1	23	21	1,939
Tasmania . .	100	12	4	0·5	17	14	1,900

TABLE 29

NEW SOUTH WALES

1931 : *Enrolments for December Quarter*

AGE	GOVERNMENT PRIMARY AND SUB-SIDISED SCHOOLS	SUPER-PRIMARY SCHOOLS				SECONDARY SCHOOLS		TECHNICAL EDUCATION			
		DAY CONTINUATION		RURAL	DOMESTIC	HIGH AND INTER-MEDIATE HIGH SCHOOLS	DISTRICT SCHOOLS	DIPLOMA COURSES	TRADE COURSES	DRESS-MAKING, DOMESTIC SCIENCE AND ART	MISCEL-LANEOUS
		COMMERCIAL	JUNIOR TECHNICAL								
Under 6	17,606	—	—	—	—	—	—	—	—	—	—
6	35,514	—	—	—	—	—	—	—	—	—	—
7–11	261,143	2,115	6,078	1,132	8,586	305 [1]	4	—	—	—	—
11						2,758	64	—	—	—	—
12						6,421	124	—	—	—	—
13											
14	14 and over	14 and over	14 and over	14 and over	14 and over	7,662	173	—	41	450	155
15	18,941	580	2,633	442	2,502	6,142	89	—	227	689	201
16						3,915	38	10	824	813	354
17						1,950	13	42	1,143	674	426
18						695	2	59	1,157	433	434
19						200	—	84	861	288	289
20 and over						53	1	581	1,440	1,610	1,867
Totals	333,204	2,695	8,711	1,574	11,088	30,101	508	776	5,693	4,957	3,726

Teachers' Colleges, 1,545. Private Schools, 103,782.

[1] *Ages* 7–11.

TABLE 30

VICTORIA

1931 : *Enrolments during the Year*

AGE	GOVERNMENT PRIMARY	PRIVATE SCHOOLS	CENTRAL SCHOOLS	HIGHER ELEMENTARY SCHOOLS	HIGH SCHOOLS	GIRLS' SCHOOLS AND SCHOOLS OF DOMESTIC ARTS	JUNIOR TECHNICAL SCHOOLS	SENIOR TECHNICAL SCHOOLS
Under 6	17,873	66,671	6–14	6–14	6–14	6–14	6–14	(Not classified according to age)
6–12	201,511		3,802	2,311	4,310	1,585	2,378	
12								
13								
14								
	Over 14		14 and over	14 and over	14 and over	14 and over	14 and over	
15	12,902		1,677	2,481	8,761	2,034	4,925	
16								
17								
18 and over								
Total	232,286	66,671	5,479	4,792	13,071	3,619	7,303	18,479[1]

Teachers' colleges, 406. [1] 1930 figures.

TABLE 31

WESTERN AUSTRALIA

Enrolment, July 1931 [1]

AGE	KINDERGARTENS: PRIMARY GRADES I TO VI	POST-PRIMARY GRADES: PRIMARY SCHOOLS	POST-PRIMARY GRADES: HIGH SCHOOLS
Under 6	2,099	—	—
6	6,324	—	—
7	6,693	—	—
8	6,789	—	—
9	6,717	—	—
10	6,678	1	—
11	6,659	26	—
12	5,268	391	11–14
13	3,496	1,796	170
14			14–16
15			683
16			16 and
17	1,422	3,321	over
18			572
19			
20			
21			
Totals	52,145	5,535	1,425

NOTES ON PRIMARY FIGURES

These figures include pupils in central schools. These schools are organised in five sections, viz.:

General Course (including Commercial Course)	1,590 pupils.
Industrial Course	1,565 ,,
Domestic Course	1,164 [2] ,,
Professional Course	1,029 ,,

In addition about 2,200 other children were taking post-primary courses.

TECHNICAL [2]

AGE	ART	COMMERCIAL	SCIENCE	DAY ENGINEERING	DOMESTIC	TRADE	LANGUAGES	GENERAL	EVENING CONTINUATION
13	10	110	20	16	110	8	1	22	(Not classified according to age)
14	24	218	54	10	110	91	3	12	
15	15	241	73	5	71	271	9	20	
16	19	204	56	—	55	292	8	28	
17	26	139	61	1	37	260	5	13	
18	11	69	61	—	42	188	—	6	
19	15	42	39	—	15	127	2	7	
20	1	6	12	—	4	51	—	1	
21	34	28	69	—	88	135	5	20	
Totals	155	1,057	445	32	532	1,423	33	129	2,777

Free Kindergarten Schools,[2] 449; Private Schools, 11,534; Correspondence Classes,[1] 2,148; Teachers' College,[2] 207.

[1] *The Government Primary School figures are for the end of July; the Correspondence Classes figure includes pupils taught during the year.* [2] *Figures for* 1930.

TABLE 32

SOUTH AUSTRALIA

1931 : *Enrolment December*

AGE	GOVERNMENT PRIMARY	HIGHER PRIMARY	CENTRAL GRADES	OPPORTUNITY CLASSES	HIGH SCHOOLS	TECHNICAL SCHOOLS			
						TECHNICAL HIGH SCHOOLS	APPRENTICE TRADE SCHOOLS	SCHOOLS OF ARTS AND CRAFTS	COUNTRY TECHNICAL SCHOOLS
Under 6	2,472	—	—	—	—	(Not classified according to age)	(Not classified according to age)	(Not classified according to age)	(Not classified according to age)
6	7,566	—	—	1	—				
7	9,276	—	—	5	—				
8	9,486	—	—	21	—				
9	9,576	—	—	59	—				
10	9,674	—	—	58	—				
11	9,599	—	—	60	—				
12	8,677	6	14	52	49				
13	6,977	110	417	43	668				
14	2,193	171	733	16	1,447				
15	399	144	549	9	1,541				
16	66	63	243	8	1,015				
17	—	—	—	—	591				
18 and over	—	—	—	—	233				
Totals	75,861	494	1,956	332	5,544	324	372	1,981	2,030

Correspondence School, 1,470 ; Teachers' College, 372 ; Private Schools, 17,981.

TABLE 33

QUEENSLAND

1931 : *Enrolments during the Year*

Government Primary and Intermediate	158,862
Correspondence School	21,782
Children visited by Itinerant Teachers	538
State High Schools	2,527
High Schools of the Central Technical College :	
Commercial	722
Industrial	360
Domestic Science	194
Other Technical College Students :	
Full-time	1,029
Part-time	8,131
Agricultural College	240
Teachers' College	328
Private Schools (1929)	30,559

TABLE 34

TASMANIA

End of Year 1931

AGE	GOVERNMENT PRIMARY	HIGH SCHOOLS	PRIVATE SCHOOLS	TECHNICAL SCHOOLS (STUDENTS ENROLLED DURING THE YEAR)	
				JUNIOR	SENIOR
Under 6	971	—	258	(Not classified according to age)	(Not classified according to age)
6	2,304	—	747		
7	3,648	—	7–13		
8	4,146	—	3,031		
9	4,171	—			
10	4,070	—	13 and over		
11	4,079	8	1,585		
12	3,598	73			
13	3,168	273			
14 and over	1,733	1,164			
Total	31,888	1,518	5,621	532	766

Teachers' College (July), 532.

CHAPTER SEVEN

NEW ZEALAND

(*See* YEAR BOOK, 1932, *ppages* 600–26, 623–4; 1933, *pages* 476–85, 555–61, 699–708, *lxxiv and xci–vi; and pages* 326–33 *of this volume*)

Population : 1,450,000

THE Ministry of Education administers the whole system of education. There are nine Primary District Boards and 45 Post-primary Boards, which, however, have no administrative or financial powers and serve, in fact, only as School Committees, although *de jure* they are local authorities. The Ministry has taken into its own hands the functions of inspection, finance, appointment of teachers, regulation of curricula, grading and other matters, and the local Boards spend the allotted money according to the regulations.

Compulsory attendance 7–14. Primary and secondary education are free. Higher education is assisted and about 50 per cent. of the students receive scholarships.

The school system is in a state of reorganisation. The old ladder consisted of seven years of primary school (Class P., Standards I–IV and Forms I–II), and four years of High School (Forms III–VI). The new system consists of five primary grades, three intermediate (the Junior High School, Forms I–III) and three secondary grades (Forms IV–VI). Technical Schools are equivalent to High Schools.

All the 33 Kindergartens are voluntary institutions receiving grants from the Ministry. There are 2,524 public and 305 private primary schools. About 12 per cent. of the pupils attend private denominational schools, mostly Roman Catholic.

The 10 *Junior High Schools* are all public.

Secondary schools fall into five classes :

(i) 8 *District High Schools.*
(ii) 42 full *High Schools.*
(iii) 22 *Technical High Schools.*
(iv) 2 *Combined High Schools* (general and technical sides), and
(v) 51 *private secondary schools.*

Apart from the Technical High Schools there are evening and day part-time vocational classes.

The University is a federation of six constituent Colleges.

Maori education is directly administered by the Ministry. More than half of the native pupils (8,384 out of 15,566) are educated in general public schools and 1,011 whites are educated in the schools for Maoris. The primary schools are either public village schools (139) or missionary schools (11) receiving grants from the Ministry. In native schools, the Maori language is used alongside with English in the primary grades. There are 11 secondary schools for Maoris, established by Missions and assisted by the Ministry. Public High Schools and University are open to natives on an equality with the whites.

Public schools are undenominational. The primary schools are by law secular, but not the secondary schools. Undenominational religious instruction and observance are practised in secondary and intermediate schools.

N. H.

TABLE 35

NEW ZEALAND, 1931

Distribution of Scholars by Ages and Grades

AGES	KINDER-GARTEN	PUBLIC PRIMARY I–VII	HIGH-SCHOOL GRADES	TECHNICAL PART TIME	TRAINING COLLEGE	UNIVERSITY	PRIVATE		SCHOOLS FOR MAORIS	
							PRIMARY	HIGH SCHOOL	PRIMARY	HIGH SCHOOL
Under 10 . .	1,976	118,250	4	—	—	—	13,014	—	4,533	—
10–11 . .	—	25,218	115	—	—	—	3,065	—	844	—
11–12 . .	—	25,585	623	39	—	—	2,981	9	797	—
12–13 . .	—	20,204	2,063	32	—	—	2,786	145	767	3
13–14 . .	—	15,037	6,351	187	—	—	2,084	566	698	22
14–15 . .	—	6,495	9,650	672	—	—	1,083	1,079	379	43
15–16 . .	—	1,428	7,622	1,329	—	—	360	1,079	121	85
16–17 . .	—	170	4,391	1,877	—	—	92	799	37	66
17–18 . .	—	47	1,984	1,877	17	—	36	458	13	46
18–over . .	—	79	728	4,533	1,148	5,111	10	167	4	35
Total . . .	1,976	212,511	33,531	10,536	1,165	5,111	25,511	4,302	8,193	300

CHAPTER EIGHT

UNION OF SOUTH AFRICA

(*See* YEAR BOOK, 1932, *pages* 627–61 ; 1933, 500–18, 601–24, *lxxii–iii, and xci–vi ; and pages* 334–49 and 742–81 *of this volume*)

Population : Europeans, 1,855,000 ; *Non-Europeans*, 6,170,000

I. UNION

THE Union Department of Education, with a Secretary of Education, is the central education authority. It directly administers (1) the Universities and University Colleges, (2) Technical Colleges, (3) Vocational full-time and part-time institutions, (4) Schools and institutions under the Children's Protection Act and (5) all schools for Natives with the exception of few schools established by the Provincial Governments of the Cape and Transvaal for coloured and native pupils. The Training Colleges, although maintained by the Union, are still administered by the Provinces. The Union Department proposes to take over teachers' training, as at present only matriculated students are accepted and these Colleges therefore fall definitely within the scope of higher education. Primary and secondary education are administered by the Provincial Departments.

The Union subsidises the Provincial school system on the basis of grants per head of average attendance. Owing to differences in provincial organisation, the Union subsidy forms a different percentage of the total expenditure of the four Provinces. Local units do not participate in educational expenditure at all.

There is no Union legislation on compulsory attendance.

All post-primary vocational schools, whether full-time or part-time, are under the Union Department. There are Trades, Housecraft and Agricultural Schools for normal children and Industrial Schools for delinquent children. Physically and Mentally Defectives have special schools.

There are seven Technical Colleges and five Universities, one of which, the University of South Africa, is a federation of five Colleges. There is one College for Natives at Fort Hare.

II. PROVINCES

CAPE PROVINCE

The Department of Public Education, with a Superintendent General, administers all primary and secondary schools and training colleges. 111 local School Boards with statutory powers are subordinated to the Department. Native schools are administered by religious bodies under the supervision of the Union.

The Union subsidy is equivalent to 79 per cent. of total expenditure.

Compulsory attendance 7–16. Education within the compulsory ages is free, irrespective of grades. Pupils in High Schools above 16 pay fees.

TRANSVAAL

The central authority is the Education Department, with a Director of Education. There are 33 School District Boards, partly elected and partly appointed, with advisory powers only.

The Union subsidy is equivalent to 66 per cent. of total expenditure.

Compulsory attendance 7–16. Primary and secondary education is free.

ORANGE FREE STATE

The central authority is the Education Department, with a Director of Education. There are 59 District Boards with limited supervisory powers.

The Union subsidy is equivalent to 80 per cent. of total expenditure.

Compulsory attendance 7–16. Primary and secondary education up to Matriculation standard is free.

NATAL

The central authority is the Department of Education, with a Superintendent of Education. There are no local authorities.

The Union subsidy is equivalent to 65 per cent. of total expenditure.

Compulsory attendance 7–15. Primary education and secondary up to 15 are free; pupils over 15 pay fees.

III. GENERAL

All provinces have similar school systems with unimportant variations.

There are no public kindergartens, as the Union pays no subsidy on pupils younger than 7 years. There are 52 private kindergartens in the whole Union.

Primary, Intermedate and Secondary education are distinguished by grades rather than by institutions. There are schools having either only primary or only secondary grades, but as a rule secondary schools include primary grades and many primary schools give instruction beyond primary grades. The two Sub-standards and the first six standards (I–VI) are primary grades; the four upper standards (VII–X) are secondary grades. The ladder is the 8–4 plan, as under the old American system.

Both British and Dutch are educated through their home language; the other official language is usually taken as a subject. Some schools in mixed communities are bilingual. Natal uses predominantly English, Orange Free State Afrikaans. Very few pupils are educated through the medium of Nederlands. Natives are educated through the medium of their native language, gradually changing to English in the upper grades. Some natives, being detribalised for two or three generations, speak at home in Afrikaans and are taught all subjects in Afrikaans. The coloured population of the Cape Province speaks either English or Afrikaans.

The public schools are undenominational; private schools for Europeans and aided schools for natives are denominational.

N. H.

TABLE 36

SOUTH AFRICA: TOTAL POPULATION AND SCHOOL POPULATION, BY PROVINCES AND RACES

	CAPE	TOTAL POPULATION (IN 000's)			PER CENT. OF SCHOLARS TO POPULATION			
		TRANS-VAAL	O.F.S.	NATAL	CAPE	TRANS-VAAL	O.F.S.	NATAL
Europeans	758·0	714·1	206·0	177·6	22	22	24	19
Natives .	1,861·5	1,836·6	538·9	1,343·3	6	4	5	4
Indians .	8·1	22·1	—	161·1	—	7	—	9
Coloured.	536·1	31·8	16·7	13·2	12	16	6	18

TABLE 37

DISTRIBUTION OF EUROPEAN SCHOLARS PER 100 PRIMARY PUPILS

PROVINCE	PRIMARY	HIGH SCHOOL	VOCATION	UNIVERSITY	PERCENTAGE IN PRIVATE SCHOOL
Cape	100	14	9	2·5	5·3
Transvaal	100	10	11	2·3	5·1
O.F. State	100	16	8	1·0	1·2
Natal	100	13	15	1·8	8·1

TABLE 38

UNION OF SOUTH AFRICA: EXPENDITURE ON EDUCATION IN £ IN 1931-2

AUTHORITY	TOTAL £	PER CENT. FROM		
		UNION	PROVINCE	DONATIONS, FEES AND OTHER
(1) Union:				
(*a*) Universities	704,324	50	—	50
(*b*) Technical Colleges	320,208	61	—	39
(*c*) Vocational	200,000[1]	90	—	10
(*d*) Children Protection Act	250,911	100	—	—
(2) Provinces:				
(*a*) Cape	3,278,982	79	12	9
(*b*) Transvaal	3,020,990	66	33	1
(*c*) O.F. State	911,928	80	19	1
(*d*) Natal	759,653	65	26	9
Total	9,446,996	74	17	9

[1] *Estimated.*

TABLE 39

SOUTH AFRICA, 1931–2: EUROPEAN EDUCATION

I. PROVINCIAL SCHOOLS (NOVEMBER)

AGE	CAPE		NATAL		TRANSVAAL		ORANGE FREE STATE		PROVINCIAL TRAINING COLLEGES AND SCHOOLS
	PRIMARY 8 YEARS	HIGH 4 YEARS	PRIMARY 8 YEARS	HIGH 4 YEARS	PRIMARY GRADES I–II STANDARDS I–VI	HIGH FOUR STANDARDS	PRIMARY 8 YEARS	HIGH 4 YEARS	
Under 7	5,663	—	1,867	—	2,674	—	1,588	—	(Not classified according to age)
8	12,720	—	2,375	—	12,175	—	3,304	—	
9	14,960	—	2,765	—	13,589	—	4,198	—	
10	15,716	—	2,807	—	14,889	—	4,441	—	
11	15,580	—	2,988	—	14,743	—	4,664	—	
12	15,540	—	2,918	—	14,382	—	4,515	—	
13	14,104	60	2,731	9	13,606	45	4,260	10	
14	14,374	600	2,563	221	13,894	514	4,495	156	
15	11,205	2,320	1,739	652	10,783	2,076	3,648	709	
16	6,275	4,760	915	1,016	6,974	3,296	2,430	1,401	
17	2,146	4,459	360	757	2,327	3,008	932	1,573	
18	479	3,500	102	504	614	2,042	288	1,240	
18 and over	125	2,494	59	216	174	1,513	75	1,156	
Totals	128,842	18,243	24,189	3,375	120,814	12,494	38,838	6,245	1,845

II. UNDER UNION CONTROL

1. Vocational Education	7,309
2. Technical Education	23,324
3. Universities	7,082

III. PRIVATE SCHOOLS

Orange Free State	576
Natal	2,754
Transvaal	8,236
Cape	9,086
	20,652

TABLE 40

UNION OF SOUTH AFRICA: SUMMARY OF STATISTICS OF NON-EUROPEAN EDUCATION, 1932

GRADES	CAPE[1]				NATAL			TRANSVAAL				ORANGE FREE STATE	
	PROVINCIAL		MISSIONS (AIDED)		ALL SCHOOLS			PROVINCIAL			MISSIONS (AIDED)	ALL SCHOOLS	
	COLOURED	NATIVES	COLOURED	NATIVES	COLOURED	INDIANS	NATIVES	COLOURED	INDIANS	NATIVES	NATIVES	COLOURED	NATIVES
Grade I	802	43	21,457	45,267	616	6,146	21,338	1,420	454	437	21,082	575	10,258
„ II	512	27	10,527	20,692	384	2,489	9,616	886	260	164	14,194		4,907
Standard I	455	34	9,677	17,064	311	2,556	6,661	933	382	91	10,963	175	3,511
„ II	501	29	8,010	12,207	300	1,840	4,204	685	206	96	9,316	115	2,283
„ III	360	28	5,847	9,424	302	1,357	3,207	529	159	53	6,289	96	1,700
„ IV	414	51	3,346	6,618	207	984	2,209	348	107	48	4,568	36	1,359
„ V	377	165	1,806	3,727	178	653	1,475	239	42	34	3,012	19	556
„ VI	288	85	932	2,469	102	537	1,079	104	27	24	2,089	14	466
„ VII	278	82	12	—	18	99	399	36	—	—	1,383	—	83
„ VIII	172	3	—	—	5	57	122	23	—	—	123	—	12
„ IX	19	—	—	—	—	5	73	15	—	—	48	—	—
„ X	12	—	—	—	3	5	649	—	—	—	18	—	—
Training College	—	—	751	1,753	—	—	563	—	—	—	494	—	106
Total	4,190	547	62,365	119,768	2,426	16,728	51,032	5,218	1,637	947	73,085	1,030	25,241

[1] *South African Native College, Fort Hare:* 130 *Students.*

CHAPTER NINE

THE IRISH FREE STATE: SAORSTÁT EIREANN

THE educational systems of the Irish Free State (as of many other countries) may be divided into two classes: the bond and the free. To the second, the smaller class, belong the two universities, the National University of Ireland and the University of Dublin; and to the first belong, more or less closely, the other educational (as distinct from professional) institutions of the country.

Administration and the School System

In 1924 the Department of Education came into being, and this Department, which is responsible to Dáil Eireann (the Lower House of Parliament) for the spending of the sums voted for Education, has since supervised, directly or indirectly, primary, secondary, vocational and technical education, the reformatory and industrial schools, the National Museum and Library, and the Metropolitan School of Art.

Primary Schools

The Department is wholly responsible for the salaries and pensions of the primary teachers, and very largely for the building, and, to a small extent, for the upkeep of the schools. The appointment and dismissal of teachers is in the hands of school managers, who are in most cases clergymen, but the Department can prevent an unsuitable appointment by the simple means of refusing salary. The teachers, according to the latest report, number 13,635, and there are 5,361 schools, of which 316 are nuns' schools, 74 belong to monasteries, and a few are "Model" schools, schools which differ from ordinary primary schools in being managed as well as maintained by the Department. The number of such schools is decreasing, the aim of the Department for some years having been to hand over the Model Schools to local management, and so to give them the standing of ordinary primary (or national) schools. At their establishment they represented the fond hope which the founders of the Irish system of national education had of introducing undenominationalism into the country. The hope proved vain; neither Catholics nor Protestants took kindly to undenominationalism, and, before long, the Model Schools differed from other primary schools, mainly in being better housed and in being managed and maintained by the State. It seems that the cost of maintenance is now almost the only obstacle to the conversion of the remaining Model Schools to ordinary national schools.

Since 1925 the primary departments of the schools conducted by the Christian Brothers have been included in the national system. The managerial system has been introduced, each school being under two managers, one of them being usually the parish priest and the other a member of the Community other than a Brother engaged in the work of the primary department. Payment on a capitation basis is made to the Community by the State, but any lay teachers employed by the managers are paid separately and at the same rate as teachers of their standing are paid in ordinary national schools. Much the same arrangements are made for the remuneration of other teaching communities (e.g. of monks or nuns) and of their lay assistants. These lay assistants, including junior assistant mistresses (a class of untrained teachers employed to teach young children in small schools), are about to become eligible for pension, and thus to be put on the same professional footing as other lay teachers.

Attendance at school is compulsory for children between 6 and 14 years of age, and the duty of seeing that the provisions of the School Attendance Act (1926) are carried out is entrusted to the police (Gárda Síochána), except in the county boroughs of Dublin, Cork, Limerick and Waterford, and in certain urban districts round the capital, in which the enforcing authority is entrusted to school attendance committees. The professional interests of the primary teachers are looked after by the Irish National Teachers' Organisation, a body which by its foresight and moderation has been able to maintain an all-Ireland position, despite the complete breach between the education systems of Northern Ireland and of the Free State. The Organisation holds a yearly Congress, and Belfast still remains one of its places of meeting. The I.N.T.O. is one of the few remaining links between North and South.

Secondary Schools

Secondary education, which used to be altogether independent of State control, began to receive public money, in the form of result fees, when the Board of Intermediate Education was established in 1878, and was subjected to a certain mild control when inspection of schools was instituted in 1909. At present, though all secondary schools are under private management, corporate or individual, the State, through the Education Department, exercises a pretty strict control over education in them; over the subjects of the curriculum and over the time-table. A certain amount of freedom, however, is allowed in the choice of books. On the other hand, the State makes capitation grants to the schools, offers scholarships for competition at annual public examinations, contributes to the salaries of the teachers by incremental payments, and operates a teachers' pension scheme. There are 287 secondary schools and between two and three thousand teachers. The great majority of schools under Roman Catholic management are the property of religious orders; the boys' schools are conducted and largely staffed by priests or by brothers belonging to various religious communities; the girls' schools are conducted by nuns. The Roman Catholic lay teachers are a minority, and are likely to remain a minority, the number of teachers belonging to religious orders who are eligible for recognition by the Department tending to increase. The number of Protestant secondary schools is proportionately greater than that of Roman Catholic Schools, but outside Dublin most of them are small. Protestant educational foundations are generally older than those of the Catholics, a fact which is sufficiently accounted for by the privileged position of Protestants (of the Episcopal Church) during two centuries. But times have changed, and in the smaller centres of population few of the Protestant schools would now be open, if they were without endowments and their shares of Government grants. On the other hand, as was to be expected, the Catholic secondary schools have benefited by the change. From small beginnings there have grown up in each of the provinces great and well-equipped schools, of which Clongowes Wood College in Co. Kildare, Rockwell College, Cashel, and Blackrock College, Dublin—to name a few—are famous in Catholic circles throughout the Empire. In the diocesan colleges boys who are intended for the priesthood get their schooling before going on to Maynooth or other theological colleges.

Vocational Education

The principle of decentralisation, applied to technical education since its establishment under the old régime (about 33 years ago), has been applied to vocational education, the Department's latest addition to the national system. Both of these branches of instruction are under the supervision of the Minister for Education, but the schools are managed by local committees appointed by county or urban councils. The committees employ and pay the teachers, but the State shares the expenses, its contribution being about three times as large as the sums raised locally.

Universities

Beyond the control of the Department are the National University of Ireland and the University of Dublin, which is indistinguishable from Trinity College.

The National University

The National University was founded in 1908, and does its work through three colleges—University College, Dublin (with which the Royal College Science was incorporated by the first Free State Government), and the University Colleges of Cork and Galway. The Cork and Galway Colleges were founded (as Queen's Colleges) in 1845, opened in 1849 and became colleges of the Queen's University in Ireland in 1850. When the Queen's University was superseded (in 1880) by the Royal University of Ireland, an examining and degree-confirming body whose headquarters occupied the site of the present University College of Dublin, the Queen's Colleges prepared their students for the new university's examinations. Since 1908 the Cork and Galway Colleges, along with the Dublin College, have been constituent colleges of the National University. The Colleges provide courses leading to degrees, but the examinations are conducted by the University. It may be doubted whether anything valuable is gained by the federal constitution of the University. At a university examination the examiners are for the most part professors of the college in which the examination is being held and, if the colleges were independent universities, there would be no fewer external examiners than are at present employed. Honours awarded and degrees confirmed by a University of Munster or of Galway would not be less valuable than similar qualifications gained at the National University. It appears to be among the aims of the Government to make of Galway College a Gaelic University, and, if this aim is ever attained, it is probable that Cork's desire for a university will be granted.

In addition to its constituent colleges, the University " recognises " St. Patrick's College, Maynooth, the famous institution at which most candidates for the Irish Roman Catholic priesthood receive their training.

The University of Dublin

The University of Dublin, or Trinity College, was founded in 1591 on the model of the English universities, especially on that of Cambridge, and is still so far sisterly in relation to Oxford and Cambridge as to admit graduates of either University to degree without further examination. A similar privilege is enjoyed at Oxford and Cambridge by Dublin (men) graduates who have been resident students at Trinity College. In recent years residence, or rather attendance, at lectures has been strongly insisted on by the College ; a student who finds attendance at lectures a serious obstacle to graduation must satisfy the Lecture Committee that his reasons for non-attendance are sufficient before he can be permitted to graduate by means of examinations alone.

Dublin University differs from its model in admitting (since 1904) women to its degrees. Women students reside at Trinity Hall, on the outskirts of the city. Catholics have been admitted to degrees since 1793. In 1873 the Fawcett Act, passed with the goodwill of the Provost and Fellows, threw open all College offices, except those of the Divinity School, to persons of all religions. Trinity might long since have become at least as Catholic as it is Protestant in " atmosphere," but the College has been banned to Catholics by their Bishop, and not till late years have Catholics entered Trinity in anything like considerable numbers.

H. R. CHILLINGWORTH.

TABLE 41—THE IRISH FREE STATE. GENERAL EDUCATION STATISTICS, 1931–2

SERVICE	NO. OF SCHOOLS OR COLLEGES	NO. OF PUPILS ON ROLLS	AVERAGE DAILY ATTENDANCE OF PUPILS	PERCENTAGE OF AVERAGE DAILY ATTENDANCE OF PUPILS TO NO. OF PUPILS ON ROLLS	TOTAL EXPENDITURE FROM PUBLIC FUNDS INCLUDING COST OF ADMINISTRATION, INSPECTION AND EXAMINATION [1]	AVERAGE COST PER PUPIL	NO. OF TEACHERS	TEACHERS' SALARIES
	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)	(*g*)	(*h*)
I.—PRIMARY:								MEN: Normal Scale: £170–370 p.a. Supernormal, £460 p.a. max. (Subject to 10% cut.) WOMEN: Normal Scale: £155–£300 p.a. Supernormal, £360 p.a. max. (Subject to 10% cut.) Average Salaries: £293 p.a. indoor (mainly women); £431 p.a. outdoor (mainly men). Scales, exclusive of board and residence for Preparatory Colleges: Principals: Men, £350—15—£440; Women, £320—10—£400. Vice-Principals: Men, £300—10—£310—15—£400; Women, £250—10—£300. Professors: Men, £240—10—£350—15—£310—15—£400; Women, £220—10—£300.
1. Schools	5,361	503,017 [2]	417,017	82·9	£3,638,758	(*a*) On Rolls, £7·23 (*b*) In average attendance, £8·72	13,635	
2. (*a*) Training Colleges under Private management	5	762	—	—	£62,282	£81·7	—	
(*b*) Preparatory Colleges, Pupil Teachers, Examinations, etc.	7	605 [3]	—	—	£33,581	—	—	
II.—SECONDARY:								Registered and Recognised Teachers: Men (indoor), £150–360 p.a. Women (indoor), £140–260 p.a. Men (outdoor), £300–410 p.a. Women (outdoor), £180–300 p.a.
1. Schools	300	28,994 (Grants paid on 25,101)	—	—	£385,986 1*s.* 3*d.*	£13 6*s.* 4*d.*	2,643	
III.—POST-PRIMARY OTHER THAN SECONDARY:								
1. Established Technical Schools	77	—	—	—	State Funds £233,500 Rates £99,401	£5 6*s.* 9*d.*	1,128	Men, £120 p.a. (minimum). Men, £300 p.a. (maximum). Women, £50 p.a. (minimum). Women, £190 p.a. (maximum). (Exclusive of bonus.)
2. Technical Classes elsewhere than in Established Technical Schools	1,677	61,816	—	—				
3. Schools of Art	1	429	—	—				
4. Training Schools of Domestic Economy	3	88	—	—				
5. Day Trades Preparatory Schools	—	—	—	—				

[1] *In the total expenditure are included the cost of Administration for each Branch and the relevant proportion of Departmental Headquarters' Charges.*
[2] *Average number of pupils on Rolls for the year ended June 30th, 1932.*
[3] *Number of pupils in Preparatory Colleges.*

CHAPTER TEN

INDIA

(*See* YEAR BOOK, 1932, *pages* 685–714; 1933, *pages* 576–600 *and lxxvi; and pages* 359–67 and 782–826 *of this volume*)

I. BRITISH INDIA

THE Government of India has no administrative powers in educational matters in the Provinces. The central Department of Education, Health and Lands is generally responsible for education in the centrally administered areas of Delhi, Baluchistan, Ajmer-Merwara and Coorg. Each Province is the central authority for education and has a Ministry of Public Instruction or an Education Department, which administers higher and secondary education and supervises primary education. Districts and municipalities have Boards of Education, which directly administer primary education. The Government of India grants small subsidies to some institutions, but does not participate in the expenditure of Provinces.

Some Provinces have passed permissive acts for compulsory attendance. Except in Punjab only a few local authorities have adopted these acts for the four primary grades, and attendance is not strictly enforced even in these districts.

The Indian school system can be represented as a 4–3–3 or 4–3–4 plan. The Primary School has four grades, or five with the infant grade; but eight in the vernacular schools of Madras and Bombay, and six in the United Provinces. The Middle School as a rule has three grades; but two in Bengal and Bihar and Orissa, and four in the Punjab and the N.W. Frontier Province, and in the English schools of Assam and the Central Provinces. The High School has three grades in Burma, Coorg, the Central Provinces, Madras, and the United Provinces, four grades in Assam, Bengal, Bihar and Orissa, and Bombay, and two in the N.W. Frontier Province and the Punjab. Colleges and Universities have, as a rule, two intermediate grades and three degree grades, or five years in all.

Primary, and the majority of Middle, schools use the vernaculars (Hindi, Bengali, Urdu, Tamil, Telugu, Malayalam and others). A minority of Middle Schools, all High Schools (except in Burma and the Central Provinces) and all universities use English (but see page 361 in regard to recent developments in the use of the vernacular in High Schools.)

Public schools are secular with the right of entry. Religious instruction is optional and is given separately. Private schools as a rule are denominational. Some private schools are recognised and aided by the Provincial and local authorities. Besides denominational schools (separate institutions) preparing for the usual examinations, Moslems have religious schools: of primary grades, *Maktabs* and *Quran* schools; and of secondary grades, *Madrassas*. Hindus have *Patshalas*, *Pali* schools and *Tols*. There are Oriental Colleges for classical languages—Arabic and Persian for Moslems and Sanskrit for Hindus. In Burma the Buddhist monasteries are places of religious education.

The sexes are separated in the majority of schools, but girls are accepted in boys' schools and many schools are becoming co-educational.

II. INDIAN STATES

In the States administration is centralised and local authorities have no administrative powers. In the larger States the Minister of Public Instruction, in minor States the Director of Education, administers the whole

system. Finance is also much more centralised than in British India; in some States local authorities make no contribution to expenditure.

Compulsory attendance has been introduced in Baroda, but is not strictly enforced.

The school system is, broadly speaking, similar to that of British India.

N. H.

Statistics

TABLE 42

DISTRIBUTION OF SCHOLARS

(*a*) *British India by Grades*, 1931–2

PROVINCE	PRIMARY I–IV	MIDDLE V–VII	HIGH VIII–X	INTER-MEDIATE DEGREE POST-GRADUATE	TOTAL
	I–V	VI–VIII	IX–XII		
Assam	310,282	15,894	8,335	1,252	335,763
			VIII–XI		
Bengal	2,147,514	228,323	121,521	25,157	2,522,515
			VIII–XI		
Bihar and Orissa	896,088	89,737	29,347	3,523	1,018,695
	I–V	VI–VIII	IX–XII		
Bombay	1,021,554	153,124	46,179	9,982	1,210,839
Burma	447,554	46,958	10,459	1,343	506,314
			VIII–XI		
Central Provinces	388,576	41,756	13,994	1,815	446,141
Coorg	9,301	242	814	—	10,357
			VIII–XI		
Madras	2,542,046	210,355	94,469	13,187	2,860,057
N.-W. Province	68,392	10,661	4,103	510	83,666
Punjab	833,551	149,759	64,024	10,118	1,057,462
United Provinces [1]	1,207,000	128,000	80,000	11,000	1,750,000

[1] *Figures for the United Provinces approximate.*

(*b*) *Indian States by Schools*, 1931

	PRIMARY	MIDDLE	HIGH	COLLEGE	TOTAL
Baroda	215,000	3,439	9,383	1,429	229,000
Gwalior	47,000	6,463	9,096	1,129	64,000
Hyderabad	270,000	29,249	17,746	1,070	318,000
Indore	31,000	6,050	2,136	196	39,000
Jaipur	27,000	4,500	8,800	1,000	41,000
Jodhpur	7,800	3,000	1,040	220	12,000
Mysore	228,000	29,879	6,847	522	265,000
Travancore	400,000	147,651	31,793	2,535	582,000

TABLE 43.—INDIA: DISTRIBUTION OF SCHOLARS IN RECOGNISED INSTITUTIONS, 1930–1.

PROVINCE	NO. OF SCHOLARS IN INSTITUTIONS FOR MALES								NO. OF SCHOLARS IN INSTITUTIONS FOR FEMALES						
	IN UNIVERSITIES	IN ARTS COLLEGES	IN PROFESSIONAL COLLEGES	IN HIGH SCHOOLS	IN MIDDLE SCHOOLS	IN PRIMARY SCHOOLS	IN SPECIAL SCHOOLS	TOTAL	IN ARTS COLLEGES	IN PROFESSIONAL COLLEGES	IN HIGH SCHOOLS	IN MIDDLE SCHOOLS	IN PRIMARY SCHOOLS	IN SPECIAL SCHOOLS	TOTAL
Madras . .	537	12,209	1,917	158,331	26,895	2,296,274	26,142	2,522,305	441	59	15,127	6,741	343,502	5,374	371,244
Bombay . .	84	7,112	2,786	77,617	23,267	942,474	17,060	1,070,400	—	—	14,354	3,429	164,693	2,272	184,748
Bengal . .	1,835	17,847	5,086	257,312	164,306	1,636,469	126,119	2,208,974	342	47	14,815	7,928	416,528	1,823	441,483
United Provinces .	4,173	6,760	3,508	74,453	97,257	1,142,325	23,826	1,352,302	168	9	5,604	31,044	61,889	682	99,396
Punjab . .	19	12,052	1,868	129,148	528,798	399,046	58,654	1,129,585	205	28	10,903	25,731	90,187	2,365	129,419
Burma . .	1,449	101	42	54,875	143,808	265,478	19,200	484,953	—	—	8,251	14,562	36,721	914	60,448
Bihar and Orissa .	—	3,580	975	46,437	74,341	817,495	18,573	961,401	3	—	1,572	5,087	62,382	877	69,921
Central Provinces and Berar .	—	1,615	464	7,462	95,761	290,356	3,080	398,738	—	8	310	6,340	28,187	803	35,648
Assam . .	—	1,181	68	16,494	44,630	244,492	4,671	311,536	—	—	1,870	4,918	21,854	170	28,812
North-West Frontier Province	—	473	38	11,784	27,369	30,746	119	70,529	—	—	284	4,279	5,968	33	10,564
Coorg . .	—	—	—	781	—	8,166	12	8,959	—	—	275	—	730	—	1,005
Delhi . . .	92	1,480	—	5,754	7,316	15,000	1,744	31,386	66	99	729	2,244	5,549	115	8,802
Ajmer-Merwara .	—	217	—	3,238	1,369	10,843	302	15,969	—	—	296	201	2,739	17	3,253
Baluchistan .	—	—	—	2,618	1,022	2,355	12	6,007	—	—	—	1,131	293	—	1,424
Bangalore . .	—	277	—	2,284	1,994	5,261	84	9,900	321	—	1,101	1,221	3,196	79	5,918
Minor Administered Areas.	—	387	—	4,828	2,096	7,700	460	15,471	—	—	1,279	1,140	3,850	68	6,337
TOTAL—BRITISH INDIA	8,189	65,291	16,752	853,416	1,240,229	8,114,480	300,058	10,598,415	1,546	250	76,770	115,996	1,248,268	15,592	1,458,422

TABLE 44

EXPENDITURE ON EDUCATION (PUBLIC SCHOOLS)

(*a*) *British India*, 1930–1

PROVINCE	TOTAL EXPENDITURE IN 000 RUPEES	IN PERCENTAGE			
		PROVINCIAL GOVERNMENT	DISTRICTS	MUNICIPAL	FEES AND OTHER
Assam	5,262·0	58·8	11·5	1·2	28·5
Bengal	43,931·5	35·0	3·7	3·3	58·0
Bihar and Orissa	18,448·2	34·8	26·0	2·3	36·9
Bombay	40,202·6	50·5	4·7	12·6	32·2
Burma	21,111·1	44·5	16·9	6·9	31·7
Central Provinces	11,286·0	48·8	18·4	9·2	23·6
Coorg	251·6	56·0	21·7	1·3	21·0
Madras	61,407·9	50·8	10·4	3·9	34·9
N.-W. Provinces	2,827·6	70·7	4·4	6·5	18·4
Punjab	32,840·6	56·3	8·4	4·1	31·2
United Provinces	38,928·4	57·1	9·6	3·8	29·5

MINOR AREAS	TOTAL EXPENDITURE IN 000 RUPEES	CENTRAL GOVERNMENT	LOCAL	FEES AND OTHER
Delhi	2,419·8	50·0	10·9	39·1
Ajmer Merwara	864·1	51·1	7·0	41·9
Baluchistan	521·4	60·5	13·7	25·8
Bangalore	956·3	41·6	3·7	54·7
Other Minor Areas	1,363·6	25·8	8·0	66·2
Total British India	283,161·4	48·1	15·5	36·4

(*b*) *Indian States*

STATE	TOTAL EXPENDITURE IN 000 RUPEES	GOVERNMENT	LOCAL	FEES AND OTHER
Baroda	3,802·5	74·8	8·3	16·9
Gwalior	565·4	100	?	?
Hyderabad	8,637·2	82·7	7·4	9·8
Indore	877·9	95	—	5
Jaipur	510·8	84·5	15·5	?
Jodhpur	556·4	98	—	2
Mysore	6,901·9	77	9	14
Travancore	4,909·6	83	—	17

(*Note.*—For analysed costs per pupil see page 359.)

TABLE 45

SCHOLARS BY COMMUNITIES FOR BRITISH INDIA IN 1931

COMMUNITY	NO. OF SCHOLARS	PERCENTAGE TO TOTAL POPULATION OF THE COMMUNITY
European and Anglo-Indians	50,084	18·4
Indian Christians	418,934	11·5
Hindus	7,821,007	4·4
Moslems	3,357,593	5·0
Buddhists	653,071	5·1
Parsis	19,790	20·2
Sikhs	195,914	6·1
Others	171,915	2·1
Total	12,688,308	4·7

TABLE 46

British India

COMPULSORY ATTENDANCE IN 1931

PROVINCE	PERMISSIVE ACTS FOR LOCAL ADOPTION	AGES	NUMBER OF LOCAL AUTHORITIES WHICH HAVE ADOPTED THE ACT		
			TOWNS	VILLAGES	TOTAL
Bengal	Primary Education Act, 1919	6–10	1	—	1
Bihar and Orissa	Primary Education Act, 1919	6–10	1	4	5
Bombay	(1) District and Municipalities Act, 1918.	6–11	4	—	160
Bombay	(2) City of Bombay Act, 1920	6–11	1	—	
Bombay	(3) Primary Education Act, 1923	6–11	5	150	
Delhi	Punjab Act, extended 1925	6–11	1	6	7
Central Provinces	Primary Education Act, 1920	6–14	22	344	366
Madras	Elementary Education Act, 1920	6–11	25	206	231
Punjab	Primary Education Act, 1919	6–11	50	2,578	2,628
United Provinces	(1) Primary Education Act, 1919	6–11	36	—	414
United Provinces	(2) District Primary Education Act, 1926	6–11	—	378	
Total			146	3,666	3,812

TABLE 47

EDUCATION AND POPULATION, 1930–1

(*a*) *British India*

PROVINCES	POPULATION IN 000	RELIGION IN PERCENTAGE	PERCENTAGE OF ALL SCHOLARS TO TOTAL POPULATION		
			MALE	FEMALE	BOTH SEXES
Assam .	8,622	Hindu, 60 ; Moslem, 30	7·7	1·4	4·7
Bengal .	50,123	Moslem, 54 ; Hindu, 43	8·4	2·2	5·4
Bihar and Orissa .	37,678	Hindu, 82 ; Moslem, 16	5·7	0·7	3·2
Bombay .	22,209	Hindu, 76 ; Moslem, 20	10·0	3·0	6·7
Burma .	14,667	Buddhist, 85 ; Hindu, 5 ; Moslem, 5	6·9	3·1	5·0
Central Provinces	15,508	Hindu, 85 ; Moslem, 5	4·9	0·8	2·9
Coorg .	164	Hindu, 85 ; Moslem, 6	8·2	4·1	6·3
Madras .	46,749	Hindu, 89 ; Moslem, 7 ; Christian, 4	10·7	3·3	7·0
N.W. Province .	2,425	Moslem, 85 ; Hindu, 6	5·6	1·0	3·5
Punjab .	23,581	Moslem, 57 ; Hindu, 27 ; Sikh, 15	9·3	1·7	5·9
United Provinces	48,409	Hindu, 85 ; Moslem, 14	5·7	0·7	3·1

(*b*) *Indian States*

Baroda .	2,443	Hindu, 90 ; Moslem, 8	14·1	8·8	11·4
Gwalior .	3,523	Hindu, 90 ; Moslem, 8	3·1	0·6	1·8
Hyderabad	14,395	Hindu, 85 ; Moslem, 10	4·0	0·6	2·2
Indore .	1,318	Hindu, 89 ; Moslem, 8	4·9	0·8	2·8
Jaipur .	2,632	Hindu, 91 ; Moslem, 8	3·0	0·3	1·6
Jodhpur .	2,050	Hindu, 90 ; Moslem, 8	1·7	0·1	0·9
Mysore .	6,558	Hindu, 90 ; Moslem, 6	7·6	1·9	4·7
Travancore	5,095	Hindu, 63 ; Christian 31 ; Moslem, 6	19·0	3·5	11·2

CHAPTER ELEVEN

UNITED STATES OF AMERICA

(*See* YEAR BOOK, 1932, *pages* 878–902; 1933, *pages* 486–99; *and pages* 368–82 and 607–18 *of this volume*)

I. GENERAL

THERE are four Federal Boards dealing with education. (1) The *Bureau of Indian Affairs* administers all schools for Indians, who are still the wards of the Federal Government. Many Indians, however, have become full citizens and are educated in ordinary schools administered by the States. (2) The *Office of Education*, under the Department of the Interior, serves as a centre of information for the whole country and assists the States by research and surveys. It also administers the schools for natives in Alaska. It has no supervisory or administrative powers within the States. (3) The *Federal Board of Vocational Education* distributes Federal grants among the States and supervises through its Inspectors all vocational schools established and maintained with the help of the Federal subsidy. (4) *District of Columbia Board of Education* administers all public schools in the Federal district.

The Federal Government makes no grants, except for vocational schools, Education in the 48 States is entirely in the hands of the States and local authorities. In the country as a whole the Federal Government is responsible for 1·6 per cent. of the total expenditure on education, the States for 15·2 per cent., and the local authorities, cities, counties, towns and districts, for 83·2 per cent.

There is no Federal legislation on compulsory attendance. The 48 States and the District of Columbia have different age limits as follows:

NO. OF STATES	AGES		NO. OF STATES	AGES	
	FROM	TO		FROM	TO
20	7	16	1	6	18
10	8	16	2	7	15
4	8	14	1	7	18
4	7	17	1	8	17
3	8	18	1	9	15
1	7	14			
1	6	16	Total 48 States and District of Columbia		

Usually regular attendance is required up to 14 and from 14 to 16 or later only for those adolescents who have not completed elementary education (eight standards) and who are not employed in industry. Labour permits are given only from the age of 14 or later. In some States part-time vocational education is compulsory up to 18.

The old American system was based on the 8–4 plan, i.e. eight elementary grades plus four High School grades. Since the war, however, reorganisation on a new 6–3–3 plan has proceeded very rapidly, and at present about 50 per cent. of High Schools have been reorganised. At the upper end of

the school ladder the old College is giving way to the Junior College as a preparatory step to the Universities. During recent years about 300 Junior Colleges have been founded. The old and the new systems can be represented as follows :

AMERICAN SYSTEM

OLD. 50 per cent.	Age	NEW. 50 per cent.
KINDERGARTEN	Up to 6	KINDERGARTEN
Elementary School 8 grades	6–7 7–8 8–9 9–10 10–11 11–12	Elementary School 6 grades
	12–13 13–14	Junior High School 3 grades some differentiation
High School 4 gr.: Ancient classics \| Modern classics \| Scientific \| English History	14–15 15–16 16–17 17–18	Senior High School 3 gr.: Cultural \| Technical \| Agricultural \| Manual Arts \| Commercial \| Home Arts \| Vocational
College 4 years	18–19 19–20	Junior College 2 years
	20–21 21–22	Senior College, graduate work and Professional-Schools (University)
Graduate work University (the 8–4 plan)		(the 6–3–3 or 6–3–5 plan)

(taken from E. Cubberley, *Public Education in the U.S.A.*)

II. THE STATES

On the basis of historical tradition and differences of administration and finance, the 48 American States can be divided into four distinct groups. This division does not coincide exactly with the official geographical division, as it has reference solely to education. Roughly, however, it is similar in its main features. The New England States, with the adjoining North

County

Town

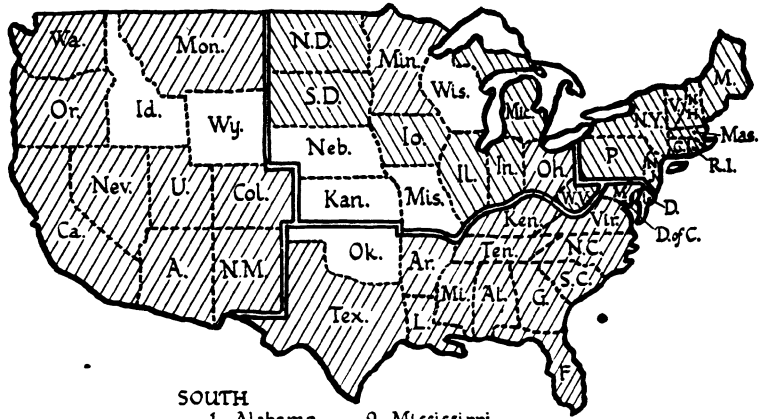
District

WEST

1 Arizona
2 California
3 Colorado
4 Idaho
5 Montana
6 Nevada
7 New Mexico
8 Oregon
9 Utah
10 Washington
11 Wyoming

NORTH CENTRAL

1 Illinois
2 Indiana
3 Iowa
4 Kansas
5 Michigan
6 Minnesota
7 Missouri
8 Nebraska
9 North Dakota
10 Ohio
11 South Dakota
12 West Virginia
13 Wisconsin



SOUTH

1 Alabama
2 Arkansas
3 Florida
4 Delaware
5 Georgia
6 Kentucky
7 Louisiana
8 Maryland
9 Mississippi
10 North Carolina
11 Oklahoma
12 South Carolina
13 Tennessee
14 Texas
15 Virginia
16 District of Columbia

NORTH-EAST (NEW ENGLAND)

1 Connecticut
2 Maine
3 Massachusetts
4 New Hampshire
5 New Jersey
6 New York
7 Pennsylvania
8 Rhode Island
9 Vermont

Atlantic States, form one block of nine States; the "Solid South" with a few adjoining States form another distinct group; the North Central States the third, and the West the fourth. (See map.)

The New England and Middle Atlantic States: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York and Pennsylvania. The original stock of these States had a common historical tradition and psychological outlook. The New England "town" formed the basis of local administration and, although at one period the tendency towards decentralisation threatened to dissolve the town into separate districts, the tradition reasserted itself and the town has been preserved as the last administrative unit. The State Boards of Education and the State Superintendents exercise only supervisory powers and the administration of education is in the hands of town boards. The counties are only geographical divisions and participate neither in administration nor in financing the educational systems. The schools are maintained chiefly by local taxation. The States furnish only 20 per cent. of the expenditure and the towns and districts 80 per cent. Although the foreign-born population forms 21 per cent. of the total, old traditions are still strong.

The Southern States: Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, Texas. The original population of these States, although not homogeneous, was very distinct from the Puritan stock of New England and had a different outlook. The negro population forms from 11 to 55 per cent. of the total in the various States. The foreign-born population is only 2 per cent., the smallest in America. Here the decentralisation tendency did not develop so far, and the counties were adopted as the local administrative unit. The States exercise more powers in administration than elsewhere and participate in expenditure to a greater extent. The States furnish 25 per cent., the counties 31 per cent. and the local units 44 per cent. of the educational budget. Owing to the large percentage of negro population and to old traditions, these States are educationally the most backward in the United States.

The North Central States: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas and West Virginia. West Virginia, although carved out of the Southern State of Virginia, by its position, its population and school tradition belongs rather to this group than to the South. The percentage of negroes in West Virginia is only 4, and the original stock came more from the New England States than from the South. The foreign-born population in this group forms 11 per cent. of the whole. The mixed origin of these States resulted in a merging of two American traditions. The influence of New England, however, was the stronger, and generally this group resembles the New England States. In seven States the township system of administration is predominant, in two States the county system, and in four the old district system is still preserved. The States furnish 8 per cent., the counties 7 per cent. and the townships and districts 85 per cent. of the educational budgets.

The Western States: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon and California. The original stock is mixed, the foreign-born population forming 12 per cent. of the whole. The Southern tradition of administration is prevalent and counties are adopted as the administrative unit in nine States, two still clinging to the disappearing district system. The States furnish 18 per cent., the counties 24 per cent. and local units 58 per cent. of the educational budgets.

We give here comparative statistics for the four groups. The relatively high figures for the Western Group are largely due to the educational policy of California. The group as a whole is progressive, owing to sparse population, comparative wealth, the influence of new environment and the

absence of negro population; but these progressive tendencies have borne fruit chiefly in California:

N. H.

TABLE 48

EXPENDITURE

STATES	POPULATION IN 000	ANNUAL COST OF EDUCATION IN 1928 IN $				
		PER CAPITA OF POPULATION	PER PUPIL ENROLLED	TOTAL EXPENDITURE IN 000 FROM TAXES		
				STATES	COUNTIES	LOCAL
New England	33,501	20·0	103	134,448	682	530,870
South .	35,197	8·6	36	76,718	94,299	133,319
N. Central .	39,927	17·3	84	53,667	48,684	589,058
West . .	10,955	20·6	92	40,228	54,553	131,172

ENROLMENT IN 000

STATES	PRIMARY AND KINDERGARTEN		HIGH SCHOOLS			PART-TIME VOCATIONAL	COLLEGES AND UNIVERSITIES	
			PUBLIC		PRIVATE			
	PUBLIC	PRIVATE	OLD SYSTEM	NEW SYSTEM			PUBLIC	PRIVATE
New England	5,174	922	659	729	147	300	48	225
South . .	7,639	213	671	525	67	190	82	110
N. Central .	6,540	788	924	980	136	210	140	173
West . .	1,919	104	319	343	32	100	65	39
	1928		1930		1928	1930	1928	

DISTRIBUTION OF SCHOLARS

STATES	PERCENTAGE OF PUPILS IN PRIVATE SCHOOLS			NUMBER OF PUPILS PER 100 PRIMARY PUPILS IN			POPULATION 5–17 IN 000	PERCENTAGE ATTENDING SCHOOLS 1928
	PRIMARY	SECONDARY	HIGHER	SECONDARY	VOCATIONAL	HIGHER		
New England	16	10	82	25	5	4·5	7,978	95
South . .	3	5	57	15	2	2·5	10,760	85
N. Central .	10	7	55	28	3	4·3	9,823	95
West . .	5	4	38	34	5	5·1	2,559	105
				1930		1928		

Illiteracy, per cent. of 10 years and over: North-eastern Group, 3·6; South, 8·3; North Central, 1·7; West, 3·1.

TABLE 49

TOTAL ENROLMENT IN 1928

Public Kindergartens	695,490
Private Kindergartens	54,455
Public Elementary	20,572,927
Private Elementary	2,235,000
Public High Schools	3,911,279
Private High Schools and Academies	341,158
Colleges and Universities, including Preparatory :	
Public	347,537
Private	571,844
In Preparatory Grades	50,588
Teachers' Colleges	219,419
Normal Schools, Public	63,644
Normal Schools, Private	14,667
Industrial Schools for Delinquents	84,317
Deaf, State	13,048
Deaf, Public (included in Elementary)	3,575
Blind	6,684
Feeble-minded, State	49,791
Feeble-minded, Public (included in Elementary)	51,814
Feeble-minded, Private	2,416
Natives of Alaska, Federal	3,742
Natives of Alaska, Public	4,829
School for Indians, Federal	28,459
Part-time, Vocational	759,263
Full-time, Vocational (included in High Schools)	240,000
Private Business Schools	188,363
Total (eliminating duplications)	29,780,000

In 1930 the enrolment in High Schools increased to 5,212,000, partly owing to reorganisation.

TABLE 50

Distribution of Scholars by Grades, 1928–9

GRADES	PRIVATE PRIMARY	PUBLIC ELEMENTARY 1928	HIGH SCHOOLS 1929	PRIVATE HIGH SCHOOL 1929	TEACHERS' TRAINING COLLEGES	JUNIOR COLLEGES	UNIVERSITIES AND COLLEGES
Kindergarten	54,455	695,490	—	—	—	—	—
Grade I	2,235,000	4,171,037	—	—	—	—	—
,, II		2,816,540	—	—	—	—	—
,, III		2,661,977	—	—	—	—	—
,, IV		2,632,474	—	—	—	—	—
,, V		2,435,466	—	—	—	—	—
,, VI		2,243,443	—	—	—	—	—
,, VII		1,534,8941	538,671	—	—	—	—
,, VIII		1,373,1261	527,839	—	—	—	—
,, IX	—	—	1,460,459	82,186	—	—	—
,, X	—	—	1,132,061	68,275	—	—	—
,, XI	—	—	852,012	59,208	—	—	—
,, XII	—	—	684,985	51,141	—	—	—
Post-second	—	—	16,152	—	274,348	44,372	824,426
Unclassified	—	—	253,749	11,298	—	—	—
Total	2,389,455	20,564,467	5,212,179	272,108	274,348	44,372	827,726

1 Grades VII and VIII are distributed between elementary and junior high schools according to the 1929 attendance.

SECTION II

The Educational Systems of Foreign Countries

Introduction

THE educational systems of foreign countries have some common features in their historical development distinguishing them from those of English-speaking countries, including the United States. In English-speaking countries, when once the State had discharged its early task of establishing law and order, the initiative towards adjustments between the individual and society may be said to have proceeded from the individual and from religious bodies or local communities. Thus in these countries movements in education were usually started by private initiative, the State gradually assuming control, at a later stage, over the system thus established, without much break in continuity. In foreign countries, on the contrary, though religious bodies played a leading part in educational development, the transition to modern ideas of education was much more abrupt, and the impulse to it came from the other end. The initiative was taken by the " enlightened " State, often in direct opposition to conservative tradition and to the Church. Hence in foreign countries educational systems tend to be more standardised and more strictly supervised by the State. The main agencies which influenced the development of foreign systems were the Roman Catholic Church and the Jesuit school system, the Renaissance and the Reformation, and the French Revolution. The predominant influence of one or other of these agencies has tended to differentiate foreign systems into distinct groups. On the basis of these historical considerations the following classification may be suggested: (1) Latin countries, (2) Central European countries, (3) Scandinavian countries, (4) the Soviet Federation, (5) Moslem countries and (6) Far Eastern countries.

Latin Countries

This group includes France, Italy, Spain, Belgium, Portugal, Rumania and nineteen Latin-American States, to which the two Mediterranean non-Latin States, Albania and Greece, can be added. In all these countries, with the exception of Albania, Greece and Rumania, which are Orthodox or Moslem, the Roman Catholic Church retained its hold on the population after the Reformation, and its spirit still permeates the well-developed religious school system which grew out of Jesuit theory and practice. The secular State, which emerged from the French Revolution and from subsequent movements in other Latin countries, was anti-clerical and

had to build up its own school system. Indeed, the anti-clerical revolt had been evident in education before the Revolution. Thus in all Latin countries there exists a dualism of clerical and secular traditions, and the two rival educational systems are very loosely connected with each other. In face of strong Roman Catholic opposition the secular State has tended to tighten its organisation and to centralise administration and finance.

As a rule there are no local education authorities, all Inspectors and Directors being appointed by the Minister. Syllabus, text-books and often the time-table are prescribed by the Ministry of Public Instruction, and strict uniformity is thus enforced on all public schools. Examinations (*Baccalauréat*) are conducted by State officials and are recognised for the Civil Service. On the other hand, old traditions persist in the new State system. Secondary schools (*Lycées* or *Liceos* and *Collèges* or *Colegios*) are of unitary type, based on Jesuit classical tradition. They are intended for the intellectual *élite* and prepare definitely for the universities. As in Jesuit Colleges, they have usually six grades for the ages 12–18. Thus a typical Latin school ladder has been evolved of six primary grades plus six secondary grades, with a break at 12. Post-primary education of a vocational character was not developed until recently. The position of women is subordinate in all Latin countries, with the result that the secondary education of girls is separate, mainly in Roman Catholic institutions, and often of lower standard than that of boys. State universities are subordinated to the Ministry and Roman Catholic universities to the Church, the autonomy of professors being thus very limited. The education of adults as a separate movement does not exist.

Summary

(1) Administration and finance centralised; (2) Independent Roman Catholic system strongly developed, from 10 to 20 per cent. of primary and from 25 to 70 per cent. of secondary scholars attending religious schools. Often there are independent Roman Catholic universities; (3) Public system secular, religious instruction prohibited; (4) A school ladder consisting of two steps, 6–6, with the break at 12; (5) Examinations usually twice: at entrance to the secondary school and the *baccalauréat*; (6) Education of sexes separate, as a rule in primary and always in secondary schools; (7) Universities subordinated either to the Ministry or to the Church.

Exceptions

There are, however, some notable exceptions to this main Latin type. In Italy German influence is comparatively strong. It is seen in the term *ginnasi* (*gymnasium*) accepted for the first four secondary grades; in the grading, 5–8, which belongs to the German type rather than to the Latin; and in the introduction of religious instruction since the Gentile reforms. Gentile himself,

however, called his system secular, as the teachers of religion are nominally appointed by the secular authorities and the syllabus of religion is historical and cultural in character rather than dogmatic. In Orthodox Rumania, public schools include religious instruction in the syllabus and the independent schools are Orthodox and Protestant. The German tradition prevalent in Transylvania (formerly Hungarian), Bessarabia (formerly Russian) and Bucovina (formerly Austrian) has influenced the grading, which is 4–7, instead of 6–6. Orthodox Greece also includes religious instruction in the syllabus of public schools. Of Latin-American States, Colombia alone includes religious instruction in the syllabus of public schools. Belgium is the only Latin country where the State endeavours to reconcile both traditions by preserving their historical character. A dual system has resulted, in which both secular and Roman Catholic schools are maintained and administered by the State. These exceptions, however, do not invalidate our account of the main type.

Central European Countries

This group is under predominantly German influence and includes Germany, Austria, Switzerland, Holland, Czechoslovakia, Hungary, Poland, Bulgaria, Yugoslavia, Lithuania, Luxemburg, Latvia and Estonia. All Central European countries are heterogeneous in religion, and most of them have strong national minorities. As a rule the Reformation split the nations into two parts, neither of which could claim an undisputed supremacy. In Poland the Orthodox Church supported the Reformers in their struggle with Roman Catholicism. In Yugoslavia the division is between Roman Catholic, Orthodox and Moslem; in Bulgaria between Orthodox and Moslem. There are thus two and even three national Churches. The spiritual schism took the form of a struggle, not between Church and State, but between the rival Churches, and the State was compelled to assume the rôle of mediator in the interests of national unity. The Roman Catholic tradition, mitigated by the influence of the Reformation and the Renaissance, is not so hostile to the secular State as in Latin countries. On the other hand, the State is not anti-clerical, but seeks to preserve neutrality in religious matters. Thus the public school system is not secular, but includes religious instruction as an integral part of the syllabus. In homogeneous religious communities the public schools are denominational, in mixed communities they are undenominational with the right of entry (*Simultanschulen*). Private initiative was not therefore called upon to preserve the Church tradition from the hostile State, and private schools conform in all respects to public schools and follow State regulations. As a rule they are subsidised by public authorities and inspected by State officials.

The heterogeneous composition of the States concerned, coupled

with strong local traditions, has tended to decentralisation of administration. In contrast to Latin countries, educational administration and finance are decentralised and local authorities play a large part in both. Primary education in most countries has an old tradition of compulsory attendance and usually extends up to 14. Secondary education has been fashioned on the model of the Protestant Gymnasia at the time of the Renaissance, and has been little influenced by the Jesuit system. The demand of the middle classes for modern education has given rise to new types of secondary schools: *Bürgerschulen* and *Realschulen*. Secondary schools usually provide a course of eight years, based on four primary grades. The break occurs at 10, two years earlier than in Latin countries. Thus the present system has developed, consisting of three main types of secondary schools: (1) *Gymnasia*, (2) *Real-gymnasia* and (3) *Realschulen*.

The historical tradition of separating the sexes is giving way, and co-educational secondary schools are gradually increasing in numbers. Examinations are usually of the German type and occur twice: at the end of the four lower grades of the secondary school (*Mittlere Reife*) and at the end of the full eight or nine grades (*Reifezeugnis*), the latter serving the purpose of a university matriculation examination.

Vocational education is much better developed than in Latin countries and in many countries is compulsory for the ages 14 to 18. Universities as a rule are State institutions, modelled on the German pattern, and enjoy a full autonomy. The Higher Technical Schools are separate institutions equivalent to the Universities. Adult education, although of recent origin, is being developed very rapidly.

Summary

(1) Administration and finance decentralised; (2) Private education subordinated to the State and of the same character as the public system; (3) Public schools partly denominational and partly undenominational, with the right of entry; (4) A school ladder consisting of four primary and eight secondary grades, 4–8, with the break at 10; (5) Examinations: *Mittlere Reife* at 14, and *Reifezeugnis* at 18; (6) Education of sexes partly separate and partly co-educational; (7) Universities with full autonomy; (8) National minorities have public schools in their mother tongues.

Exceptions

The exceptions to this type are Holland, Estonia and Latvia. Holland since the French Revolution has been strongly influenced by France. Her public system is dual, consisting of secular and denominational schools, and her grading is 6–6, as in Latin countries. In all other respects and in terminology Holland belongs to the German type. Estonia and Latvia, partly under Scandinavian influence, have different grading: in Estonia 6–6, in Latvia, 7–4.

Perhaps these two Baltic countries should have been included in the Scandinavian group, but the heterogeneity of their population and national minorities show more affinity to the Central European group.

Scandinavian Countries

To this group belong Denmark, Norway, Sweden, Finland and Iceland. All these countries are homogeneous in religion and in national composition. Finland alone is bilingual. The Lutheran Church is the national Church and is identified with the State. Until recently the Church participated in school administration, and in Sweden primary schools are still administered conjointly by the State and the Church. Thus the public system is Lutheran and private schools have no distinctive features. As a rule they receive government grants and are supervised in the same way as public schools. The old democratic tradition of self-government has resulted in decentralisation of administration and finance. The same tradition led to the early establishment of a democratic school system with a common ladder for all. Usually the ladder consists of three steps, with breaks at different ages. The upper step, the *Gymnasium*, has only three grades and is differentiated into three curricula : classical, modern and scientific. The old tradition of equality of the sexes has resulted in a common curriculum for girls and boys, and Scandinavian schools of all grades are as a rule co-educational. Examinations are held twice : at the end of the Middle School (*Realexamen*) and at the end of the *Gymnasium* (*Studentexamen*), the latter serving the purpose of a university matriculation examination. Universities are of the German pattern, with similar autonomy. Adult education has the oldest tradition in Europe and is imparted in the Folk High Schools, a feature peculiarly Scandinavian.

Summary

(1) Administration and finance decentralised ; (2) Private education subordinated to the State and of the same character as the public system ; (3) Public schools, Lutheran ; (4) A school ladder consisting of three steps, the last having three grades ; (5) Examinations : *Realexamen* and *Studentexamen* ; (6) Co-education in all grades ; (7) Universities with full autonomy ; (8) Folk High Schools for the education of adults.

It will be observed that the German and Scandinavian types have common features distinct from the Latin type, but a separate classification is justified by the peculiar features of Scandinavian countries.

The Soviet Federation

The nine Soviet Republics carved out of the old Russian Empire (Russia, Ukraine, White Russia, Georgia, Armenia, Azerbaidzhan, Turkmenistan, Uzbekistan and Tadzhikistan) have developed a unique system based on the old Russian tradition, modified by the

Communistic Marxian doctrine. The old Russia had two historical traditions which struggled for supremacy. The democratic tradition upheld the principles of decentralisation, a secular public system and a common ladder for all. The autocratic tradition on the contrary promoted centralisation, a religious Orthodox system and class distinction in education. The Soviet system is a peculiar synthesis of both. By the constitution, both administration and finance are highly decentralised, but through centralised Party administration the Soviet Government achieves a stricter uniformity even than France. The public system is officially secular, but the Marxian doctrine has developed into a kind of anti-Church religion and the whole system is permeated with a denominational Communistic spirit. Officially the school ladder is common to all, but in practice there are privileged schools for Communists, and class distinctions are recognised by the Government. Private schools are prohibited by law and co-education is compulsory by law. Secondary education has lost its academic character and has become narrowly vocational. The universities have been dissolved and transformed into vocational Higher Institutes. National Minorities have schools of all grades in their mother tongues, but the syllabus is strictly Marxian, as in the rest of the system. It should be added, however, that since the autumn of 1932 there has been a certain change of Soviet policy, though it is too early to judge its results.

Summary

(1) Administration and finance decentralised ; (2) Private schools prohibited by law ; (3) Public system anti-religious with an atheistic-Marxian bias ; (4) A school ladder consisting of two steps of general education followed by the third step of vocational education, 4–3–3 ; (5) Examinations abolished, but reinstated in 1932 ; (6) Co-education compulsory in all grades ; (7) Higher Vocational Institutes are subordinated to the Government, without any autonomy ; (8) Adult Education conducted by the State as partisan propaganda ; (9) National minorities have public schools in their mother tongues.

Moslem Countries

To this group belong Turkey, Persia, Egypt, Iraq, Afghanistan and the French protectorates of Morocco and Syria. The old Moslem tradition developed an original system of religious education, divided into three steps : primary, usually four years ; secondary, four years ; and higher, also four years. The instruction was based on Arabic and Persian culture, and had a definite religious character. This system was, however, antiquated in its curriculum and methods and could not satisfy the needs of a modern State. The modernised post-war governments did not attempt to adapt the inherited system, but have built up a new one, borrowed from France, side by side with the old. Thus in Moslem countries the same dualism can be observed as in Latin countries. The tradi-

tional Moslem system is hostile to all modernisation and survives only as a relic of the past. The new public system, as a rule secular, aims at rebuilding the nation on a new basis. The issue of the struggle seems hardly in doubt; the Moslem system seems doomed to extinction, as has already happened in Turkey. Whereas in Latin countries religious tradition has survived the conflict and holds its ground, in Moslem countries the native tradition is not strong enough to withstand the attack of the centralised State.

Summary

(1) Administration and finance centralised; (2) The independent Moslem system gradually losing ground; (3) Public system secular; (4) A school ladder of the Latin type, 6–6; (5) Examinations equivalent to the Latin type; (6) Education of sexes separate; (7) State universities subordinated to the Government, Moslem universities independent.

Far Eastern Countries

To this group belong Japan, China and Siam. In these countries the predominant cultural tradition was associated with Buddhism, although other influences are also present. As in Moslem countries, the old Buddhist tradition of monastic religious education was not adequate to the requirements of the modern State and therefore the new public systems had to be built up independently of it. But whereas Moslem countries took the Latin type as a model, the Far Eastern countries were influenced rather by the Anglo-Saxon world, though Japan was originally much influenced by France. The English language is accepted as the first foreign language, and Far Eastern students usually complete their education in America or England. Thus the old native tradition gave way to a new system of the Anglo-Saxon type. Administration and finance are as a rule decentralised. Independent schools are denominational and often established by English and American missions. The public system is secular, as in America, or undenominational with religious instruction. Co-education is a rule in China and separation of sexes in Japan and Siam.

Summary

(1) Administration and finance decentralised; (2) Private system denominational; (3) Public system either secular or with religious instruction; (4) A school ladder similar to the new American plan, 6–3–3; (5) Examinations: entrance to secondary and Matriculation; (6) Co-education and separation of sexes; (7) State universities have a limited autonomy, independent universities of American pattern. Japan presents some peculiar features, with a new system of higher elementary and continuation schools developing side by side with an older 6–5–4 or 6–4–4 system.

We give here a comparative table of different types of educational systems according to their main features :

I. THE SIX TYPES

TYPE	ADMINISTRATION AND FINANCE	SCHOOL LADDER	INDEPENDENT SCHOOLS	PUBLIC SCHOOLS	EDUCATION OF THE SEXES
1. Latin .	Centralised	6–6	R.C.	Secular	Separate
2. German .	Decentralised	4–8	The same as public	Denominational and simultaneous	Both co-education and separation
3. Scandinavian	Decentralised	5–4–3	The same as public	Lutheran	Co-education
4. Soviet .	Decentralised	4–3–3	Prohibited	Secular-Communist	Co-education
5. Moslem .	Centralised	6–6	Moslem	Secular	Separate
6. Far Eastern	Decentralised	6–3–3	Buddhist and denominational	Secular and denominational	Both co-education and separation

It may be useful to analyse the first type, the Latin, more closely in tabular form, so as to bring out the correspondences and divergences of the large group of countries belonging to this type. It will be observed that the correspondence is very close except in regard to the grading of the school ladder and the percentage of secondary scholars in Roman Catholic schools. In these two features there are considerable divergences.

II. THE LATIN TYPE: 25 LATIN COUNTRIES, WITH ALBANIA AND GREECE

TYPE	ADMINISTRATION AND FINANCE	SCHOOL LADDER	%% IN R.C. SECONDARY SCHOOLS	RELIGION		EDUCATION OF SEXES IN SECONDARY	EXAMINATIONS	UNIVERSITY AUTONOMY
				INDEPENDENT SCHOOLS	PUBLIC SCHOOLS			
LATIN	CENTRALISED	6–6	40–60	R.C.	SECULAR	SEPARATE	BACCALAUREAT, ETC.	LIMITED
1. Albania	Yes	4–6	40	R.C., Moslem, Orthodox	Yes	Yes	Yes	—
2. Argentine	Yes	7–5	25	Yes	Yes	Yes	Yes	Yes
3. Belgium	Yes	6–6	60	Yes	51% Yes	Yes	Yes	—
4. Bolivia	Yes	5–6	35	Yes	Yes	Yes	Yes	Yes
5. Brazil	Within the States	5–6	60	Yes	Yes	Yes	Yes	Yes
6. Chile	Yes	6–6	35	Yes	Yes	Yes	Yes	Yes
7. Colombia	Finances decentralised	6–6	50	Yes	No	Yes	Yes	Yes
8. Costa Rica	No	6–5	?	Yes	Yes	Yes	Yes	Yes
9. Cuba	No	8–4, 6–6	50	Yes	Yes	Yes	Yes	Yes
10. Ecuador	Yes	6–6	12	Yes	Yes	Yes	Yes	—
11. France	Yes	6–6	40	Yes	Yes	Yes	Yes	Yes
12. Greece	Yes	6–6	12	Orthodox	No	Yes	Yes	Yes
13. Guatemala	Yes	6–5	30	Yes	Yes	Yes	Yes	Yes
14. Haiti	Yes	6–6	65	Yes	Yes	Yes	Yes	—
15. Honduras	Finances decentralised	5–5	30	Yes	Yes	Yes	Yes	—
16. Italy	Yes	5–8	20	Yes	No	Yes	Yes	Yes
17. Mexico	Within the States	6–5	40	Yes	Yes	Yes	Yes	Yes
18. Nicaragua	Yes	6–5	50	Yes	Yes	Yes	Yes	—
19. Panama	Yes	6–5	50	Yes	Yes	Yes	Yes	—
20. Paraguay	Yes	5–6	60	Yes	Yes	Yes	Yes	—
21. Peru	Yes	5–5	40	Yes	Yes	Yes	Yes	—
22. Portugal	Yes	4–7	?	Yes	Yes	Yes	Yes	Yes
23. Rumania	Yes	4–7	38	Orthodox, Protestant, R.C.	No	Yes	Yes	Yes
24. Salvador	Yes	6–5	50	Yes	Yes	Yes	Yes	—
25. Spain	Yes	6–6	70	Yes	Yes	Yes	Yes	Yes
26. Uruguay	Yes	5–6	?	Yes	Yes	Yes	Yes	—
27. Venezuela	Yes	6–6	?	Yes	Yes	Yes	Yes	—

ABYSSINIA (ETHIOPIA)

Population : 11,000,000

The Government established the first school in 1907. Ten public schools.

The Orthodox Abyssinian Church has its own system of religious schools using the dead language Géez ; therefore of little value to the population.

European Missions.—About ten R.C. schools with 400 pupils and about twelve Protestant schools with 500 pupils.

Language.—Amharic and Galla.

ALBANIA

(*See* YEAR BOOK, 1933, *pages xcviii–ix*)

Population : 1,000,000

ADMINISTRATION AND FINANCE.—Ministry of Culture administers education through its inspectors. Finance is also centralised.

LEGISLATION.—Nominally compulsory attendance 7–13, but not enforced. State schools free.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—12 State and 3 private kindergartens. Ages: 3–7.

(*b*) **Primary.**—90 per cent. State schools. In towns, six-years' course; in rural communities, four years. Ages : 7–11 ; 7–13. 80 per cent. of pupils are boys. Attendance : 23 per cent. of population 7–13.

(*c*) **Intermediate and Secondary.**—(i) *Gymnasia* for boys. Incomplete, higher grades lacking. Three State and two private. (ii) *Lycées* : one State, for boys, complete ; and one private for girls, incomplete. Ages : 10–16, or 18. Attendance : about 1 per cent. of population 10–16. Most pupils are scholarship-holders.

(*d*) **Vocational.**—One State Commercial School. Private : one technical, one agricultural, two domestic science for girls, one commercial. Attendance : 650, or about 0·5 per cent. of post-primary population.

HIGHER EDUCATION.—(*a*) No university. About 250 Albanians study in foreign universities. Majority are scholarship-holders. (*b*) *Theological Colleges :* one R.C., one Orthodox and one Moslem. Enrolment about 100. (*c*) *Normal Schools :* two State (one boys and one girls) and three private normal classes for girls ; enrolment about 350.

LANGUAGE.—Two local dialects (Gheg and Tosk) used in primary schools. Secondary and vocational schools maintained by foreign missions employ foreign languages (Italian, French and English).

CO-EDUCATION.—Pre-school, co-educational. Primary and secondary schools, separate.

RELIGION.—State schools secular since 1930. Independent schools denominational : R.C., Orthodox and Moslem.

ARGENTINE

(*See* YEAR BOOK, 1932, *pages* 938–49)

Population : 10,500,000

ADMINISTRATION.—(*a*) *Federal.* Ministry of Justice and Public Instruction, with the National Council of Education, administers the Federal capital and 10 territories in all matters. In 14 Provinces it administers the national primary schools and all secondary and higher education. (*b*) *Provinces.* The 14 Provinces have independent Provincial Boards of Education administering the provincial primary schools.

LEGISLATION.—In most Provinces, compulsory attendance 6–14 ; in some 8–12 or 8–14. Not strictly enforced. Primary, secondary and vocational public schools are free.

FINANCE.—National primary schools and all secondary, vocational and higher institutions maintained by Federal funds; Provincial primary schools by Provincial funds. Ratio: 75 per cent. Federal, 25 per cent. Provincial.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Only 14 Federal Kindergartens in the country, annexed to Normal schools. Enrolment: 1,420. Ages: 3–6.

(*b*) **Primary.**—44 per cent. of schools are national, enrolment 43 per cent. of primary pupils; 46 per cent. of schools are provincial, enrolment 48 per cent.; 10 per cent. of schools are private, enrolment 9 per cent. Attendance: about 68 per cent. of population 6–14.

(*c*) **Intermediate and Secondary.**—(i) FEDERAL: 52 *Colegios Nacionales* (84 per cent. boys) and 2 *Liceas Nationales de Señoritas*. Enrolment: 18,000. Ages: 13–18. Five-year course. (ii) PRIVATE. 76 *Colegios, Escuelas* and *Institutos*, equivalent to *Colegios Nacionales*, and affiliated to them. Under the supervision of the Federal Ministry. Enrolment: 6,200 (95 per cent boys). (i) and (ii) Attendance: about 3 per cent. of population 13–17; 75 per cent. in State and 25 per cent. in private schools.

(*d*) **Escuelas Normales.**—Normal schools serving as secondary schools for girls. (i) FEDERAL: 9 *Escuelas Normales de Preceptores*: two-year course for rural teachers. Ages: 13–15 or 16. 66 *Escuelas Normales de Maestros*: four-year course for head teachers and urban primary teachers. Ages: 13–17 or 18. 11 *Escuelas de Profesores*: seven-year course for some teachers in secondary schools. Ages: 13–20. Enrolment: 15,600 (18 per cent. boys). (ii) PRIVATE. 36 private normal schools. Four-year course, equivalent to *Escuelas de Maestros*. Enrolment: 5,200 (5 per cent. boys). (i) and (ii) Attendance about 2½ per cent. of population 13–17.

(*e*) **Vocational.**—(i) FEDERAL: 93 *Institutos Especiales*. (Of which 18 are commercial, both sexes; 46 Industrial and Arts and Crafts, boys; and 20 professional schools for girls.) Ages: 13–18. Enrolment: 22,000. (ii) PRIVATE: 17 incorporated, with 513 students (67 girls), and 3 independent with 650 students. Attendance: about 3 per cent. of population 13–17.

HIGHER EDUCATION. (*a*) 5 Federal *Universities*. Enrolment: 19,500. (*b*) *Adult Education*: Evening Courses, all public institutions.

EXAMINATIONS.—*Leaving Certificate* after 7 years in primary school, admitting to secondary and vocational schools. *Matriculation* (*Bachillerato*) leaving examination of secondary schools, admitting to the universities.

LANGUAGE.—Spanish throughout.

CO-EDUCATION.—Pre-school and primary school, co-educational. Secondary and vocational schools, in practice separate. Universities, co-educational.

RELIGION.—All public schools secular. Private schools (except schools for English residents) Roman Catholic.

AUSTRIA

(*See* YEAR BOOK, 1933, *pages xciv–c and pages* 873–90 *of this volume*)

Population: 6,600,000

ADMINISTRATION.—(*a*) *State* (*Bund*). Ministry of Education (*Bundesministerium für Unterricht*) administers all schools except trade schools under *Bundesministerium für Handel* and agricultural schools under *Bundesministerium für Landwirtschaft*. (*b*) *Provinces* (*Länder*). Boards of Education (*Landesschulrat*) administer all schools except schools of higher

education under supervision of the State Ministries. (*c*) *Local.* District School Councils for primary education, and village (communal) school councils.

LEGISLATION.—Compulsory attendance 6–14, full-time. Part-time, 14–18; local option; enforced only in Vienna. Primary, intermediate and continuation schools are free.

FINANCE.—31 per cent. State, 69 per cent. local (provinces and communes).

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens, public and private. Ages: 3–6. Attendance: about 13 per cent. of population 3–6.

(*b*) **Primary.**—*Grundschule*, four years, ages 6–10, sometimes five years, 6–11. 95 per cent. of schools and pupils, State; 5 per cent. of schools, private. Attendance strictly enforced; 99·5 per cent. of population 6–14.

(*c*) **Intermediate.**—*Hauptschule.* Four years, ages 10–14. 83 per cent. of schools and 90 per cent. of pupils, State; 17 per cent. of schools and 10 per cent. of pupils, private. Attendance strictly enforced, only pupils of secondary schools being exempted, and retarded pupils of primary schools.

(*d*) **Secondary.**—(i) *Gymnasien*: 31 State (*Bund*), 15 R.C. Church, one private. (ii) *Realgymnasien*: 24 State (*Bund*), three Provincial (*Land*), one Municipal, 11 R.C. Church, 30 private. (iii) *Realschulen*: 33 State, one Provincial, one R.C. Church, two private. (iv) *Frauenoberschulen*: two R.C. Church, two private. All secondary schools divided into two parts: first four years (10–14) common to all, equivalent to the advanced division of *Hauptschule*; and second four years (14–18) differentiated syllabus: *Gymnasien* with Latin and Greek; *Realgymnasien*, Latin and a modern language; *Realschulen*, modern languages; *Frauenoberschulen* for girls. Enrolment: (*a*) 17,208; (*b*) 19,963, (*c*) 14,372 and (*d*) 439. Attendance: about 6 per cent. of population 10–18. Five State (*Bund*) boarding schools free to specially selected pupils. (See later figures on pages 882–5.)

(*e*) **Vocational**—(i) *Part-time compulsory*: *Fortbildungsschulen*, ages 14–18. Attendance about 14 per cent. of population of those ages. (ii) *Full-time voluntary*, ages 14–16 or 14–18: *Handelsakademien* four years, *Handelsschulen* two years, *Fachschulen* four years, agricultural schools one to four years. Attendance: about 7 per cent. of population 14–18.

HIGHER EDUCATION.—(*a*) Three *Universities*, one *Arts College*, one *Theological College*, seven *Hochschulen* (two Technical, one Agricultural, one Mining, one Veterinary and two various). Enrolment about 22,000. (*b*) *Teachers' Training.* Primary teachers' in four-year colleges based on the *Hauptschule* and one Pedagogical Institute in Vienna connected with the University. (*c*) *Music and Art Academies.* (*d*) *Adult Education.* In rural districts under State supervision; in Vienna and other towns *Volkshochschulen* under private management; other institutions under R.C. Church and Socialist trade unions.

EXAMINATIONS.—(*a*) Entrance examination to secondary schools at the age of 10, after four years of primary school. (*b*) *Reifezeugnis*, admitting to higher institutions at the age of 18, after eight years of secondary school.

LANGUAGE.—German. Czech, Croat, Slovene and Magyar in 117 primary schools.

CO-EDUCATION.—Pre-school, co-educational; primary and intermediate schools, separate as a rule, but many primary schools co-educational; secondary and vocational schools and universities, co-educational.

RELIGION.—" Simultaneous " (i.e. right of entry) for all; religious instruction separate. Independent schools R.C.

BELGIUM

(*See* YEAR BOOK, 1933, *pages xciv–c*, 115–17, 125, 130–1)

Population : 8,000,000

ADMINISTRATION.—*Ministère des Sciences et des Arts* for all schools except vocational schools, which are under *Ministère d'Industrie, du Travail et de la Prévoyance sociale* and agricultural schools under *Ministère d'Agriculture.* Local administration is in the hands of Provincial and Communal Councils subordinated to the Ministry.

LEGISLATION.—Compulsory attendance 6–14. Free primary education.

FINANCE.—75 per cent. State, 25 per cent. provinces and communes. (Provinces less than 2 per cent.)

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—*Ecoles Gardiennes*: (i) *Communales*, secular, maintained by communes, State grants ; 35 per cent. of schools, 31 per cent. of pupils. (ii) *Adoptées*, religious, adopted by communes, State grants ; 33 per cent. of schools, 40 per cent. of pupils. (iii) *Adoptables*, religious, recognised, no communal grants, but State grants ; 32 per cent. of schools, 29 per cent. of pupils. Attendance : 66 per cent. of population 3–6.

(*b*) **Primary.**—*Ecoles primaires.* (i) *Communales*; 60 per cent. of schools, 51 per cent. of pupils. (ii) *Adoptées* ; 23 per cent. of schools, 31 per cent. of pupils. (iii) *Adoptables* ; 17 per cent. of schools, 18 per cent. of pupils. Eight years, 6–14. Attendance strictly enforced : 99 per cent. of population 6–14.

(*c*) **Intermediate.**—*Ecoles moyennes.* 138 State, 14 local, 3 recognised and 330 independent (R.C.). The majority of public schools (98) are for boys, the majority of independent (240) for girls. Ages 12–15. Usually primary grades are added as preparatory. 60 per cent. of the pupils are in public schools. Attendance : 7 per cent. of population 12–15.

(*d*) **Secondary.**—(i) *Athénées royaux* for boys ; 24 full institutions and 12 departments at intermediate schools. Maintained by the Government ; classical syllabus ; six years, 12–18. (ii) *Collèges* ; 5 local, 11 *patronées* (recognised) and 97 independent R.C. for boys. Six years, 12–18. (iii) *Lycées* for girls, 8. Six years, 12–18. (i), (ii) and (iii) Enrolment : public, 14,000 ; independent, 23,000. Attendance : about 6 per cent. of population 12–18.

(*e*) **Vocational.**—Communal, with grants from the State. (i) *Post-primary full-time schools* : Commercial (72), Industrial (143), Drawing (88), Agricultural (38), also music and painting. Ages 14–16–18. (ii) Post-primary part-time schools and classes : *professionel* (trade schools) 591, *ménager* (domestic training) 245, also continuation agricultural courses. (i) and (ii) Enrolment : full-time, 100,000 ; part-time, 100,000. Attendance : about 50 per cent. of population 14–16.

HIGHER EDUCATION.—(*a*) *Universities.* Two State, Liege (French) and Ghent (Flemish) ; one free, Brussels (French) ; one R.C., Louvain (French and Flemish). Two Colleges, two Technical Colleges and 20 Higher Commercial Schools. Enrolment 17,000. (*b*) *Teachers' Training.* (i) *Ecoles Normales Primaires* : 16 State and 65 private R.C. recognised. Four years, admission at 15 after examination, or into preparatory class at 14 after eight years in primary school. (ii) *Ecoles Normales Moyennes* : 7 departments State, and more private R.C. Two years after *Ecole Normale Primaire*, for teachers in intermediate schools. (i) and (ii) Enrolment 8,000. (*c*) Music and Art Academies. (*d*) *Adult Education.* Communal and R.C. courses with grants from the State.

EXAMINATIONS.—Admission examination to secondary schools at 12.

Leaving examination after six years in secondary schools, admitting to the universities.

LANGUAGE.—French throughout in Walloon provinces; Flemish throughout in Flemish provinces; German in primary schools in districts annexed from Germany.

CO-EDUCATION.—Pre-school, co-educational; primary schools, 35 per cent. co-educational; intermediate, secondary and vocational schools, separate; universities, co-educational.

RELIGION.—All public communal schools are secular, with separate religious instruction. Adopted, recognised and independent schools are R.C.

BOLIVIA

Population : 3,000,000 [1]

ADMINISTRATION AND FINANCE.—Ministry of Instruction and Agriculture, central authority for the whole system.

LEGISLATION.—Compulsory attendance 6–12. Not enforced.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Few kindergartens in the cities.

(*b*) **Primary.**—In rural communities four years. Very few rural schools. In towns six years, 6–12. Attendance: about 20 per cent. of population 6–12. Majority of schools, public; minority, R.C.

(*c*) **Secondary.**—(i) *Colegios nacionales* or *Liceos*: 17 State, 5 R.C. and 5 private. Six years, 11–17, based on five years of primary school. Mostly for boys. (ii) *Escuelas Normales*: three for rural teachers, one for urban teachers. Three or four years, ages 11–15. Mostly for girls. Serve as secondary schools also. Attendance: about 1 per cent. of population 11–17.

(*d*) **Vocational.**—There are commercial schools for boys and domestic science for girls.

HIGHER EDUCATION.—Two *Universities* and six separate Faculties (Colleges). One Mining School and one Institute of Agriculture. All State. Enrolment: 800. One *Instituto Normal Superior* for teachers. One Music Academy.

EXAMINATIONS.—*Bachiller en ciencias* or *en letras* after six years of secondary education, admitting to the universities.

LANGUAGE.—Spanish.

BRAZIL

Population : 40,000,000

ADMINISTRATION.—(*a*) *Federal.* Ministry of Public Instruction created in 1931. Supervises secondary and higher education throughout the country and administers the Federal districts and foreign colonists (Germans, Italians). Vocational education under Ministries of Agriculture and Industry and Commerce. (*b*) *States.* Each of the twenty States has a Board of Education administering primary, secondary and some higher institutions, maintained by each State. (*c*) *Local.* Municipalities administer municipal primary schools.

LEGISLATION.—(*a*) *Federal.* In Federal districts compulsory attendance 7–14, not fully enforced. (*b*) *States.* No compulsory attendance.

FINANCE.—*Federal :* grants for primary schools of immigrants and for Federal institutions. *States* maintain primary, secondary and a few higher institutions; 14 per cent. of expenditure Federal, 81 per cent. State, and 5 per cent. municipal.

[1] 57 per cent. of population Indians, 30 per cent. mestizos and 13 per cent. white.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Fifteen public and some private kindergartens in the country.

(*b*) **Primary.**—In the Federal Districts seven years, 7–14 ; in three States, six years ; in two States, five years ; in 16 States three or four years. Ages 7–10 or 11, or 12. Very few municipal or private schools, the rest State. About 24,000 schools, with 1,350,000 pupils. Attendance : about 40 per cent. of population, 7–12.

(*c*) **Secondary.**—(i) *Colegios*, *Gymnasios* or *Liceos* for boys. About 60 State and about 700 private secondary schools (R.C.). Enrolment : State, 10,000 ; private, 45,000. Five or six years, based on five years of primary school at 12. Ages 12–17 or 18. (ii) *Normal Schools*. Serve as secondary schools for girls. Two-thirds independent R.C., one-third State. Admit after the completion of the advanced division of the primary school at 15. Two to four years. Ages 15–17–19. (i) and (ii) Attendance : about 0·5 per cent. of population, 12–18.

(*d*) **Vocational.**—Federal trade schools of primary and secondary grade. About 420 commercial, industrial and professional schools, based on primary school. Enrolment : 40,000. Attendance : about 1 per cent. of post-primary population.

HIGHER EDUCATION.—(*a*) *Universities :* One Federal, one State ; seven Federal and 24 State separate Faculty ; two R.C. independent. Enrolment : 8,000. (*b*) Academies of Arts and Music.

EXAMINATIONS.—*Bacharel em Letras* after six years of secondary education, admitting to the universities.

RELIGION.— Public schools, secular. Independent, R.C.

LANGUAGE.—Portuguese. Foreign schools, English, American, German and French.

BULGARIA

(*See* YEAR BOOK, 1933, *pages xciv–c*)

Population : 6,000,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Public Instruction administers the whole system. (*b*) *Local.* Elected District School Councils subordinated to the Ministry.

LEGISLATION.—Compulsory attendance 7–14. Free elementary and intermediate education.

FINANCE.—State maintains secondary and higher institutions ; local authorities the primary and intermediate.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—80 public and 40 private kindergartens. Ages 3–7. Attendance : 2 per cent. of population 3–7.

(*b*) **Primary.**—89 per cent. public ; 11 per cent. private, maintained by religious (and national) minorities, mostly Moslem Turks, aided by government grants. Four years, 7–11. Attendance : 90 per cent. of population 7–11 ; for Bulgarians 94 per cent., for Turks 66 per cent.

(*c*) **Intermediate.**—*Progymnasia.* Three years, 11–14. 60 per cent. separate institutions, 40 per cent. combined with primary ; 95 per cent. public, 5 per cent. private (mostly Turkish-Moslem). Attendance : 77 per cent. of population 11–14.

(*d*) **Secondary.**—(i) *Gymnasia :* 103 (86 State and 17 private), boys, girls and mixed. (ii) *Pedagogical Secondary Schools :* 12, for girls. (i) and (ii) Five years, 14–19. Attendance : about 7 per cent. of population 14–19. 60 per cent. free places in public secondary schools.

(*e*) **Vocational.**—Professional and Domestic Science Schools, 200 public and 50 private. Post-intermediate, 14–18. Attendance : about 5 per cent. of population 14–18.

HIGHER EDUCATION.—(*a*) *Universities :* One State, one independent; enrolment 6,800. (*b*) Two *Teachers' Institutes*, enrolment 600. Two years based on secondary education. (*c*) Music and Art Academies.

EXAMINATIONS.— Matriculation after five years of secondary school (19), admitting to the universities.

LANGUAGE.—Bulgarian. For non-Bulgarian minorities, mother tongue in primary schools. Turks have religious secondary schools in Turkish.

CO-EDUCATION.—Pre-school, primary and intermediate schools are co-educational; secondary schools are partly separate and partly co-educational. Universities are co-educational.

RELIGION.—Public schools are "simultaneous" (i.e. right of entry) with separate religious instruction. Most private schools are Moslem, a minority Jewish and R.C. State religion: Bulgarian Orthodox.

CHILE

Population : 4,300,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Public Instruction for all branches except industrial schools, which are under the Ministries of Industry and Agriculture. (*b*) *Local.* Municipalities maintain a small number of primary schools but have no administrative powers.

LEGISLATION.—Compulsory attendance 6–14, enforced since 1928 (first three grades).

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A very few kindergartens in the cities.

(*b*) **Primary.**—(i) *Urban :* six years, 6–12; enrolment 140,000. (ii) *Rural :* four years, enrolment 110,000; less than four years, 233,000. (iii) *Private.* Subsidised by the Ministry: four years, enrolment 50,000. Not subsidised: enrolment 12,500. (i), (ii) and (iii) Attendance: 90 per cent. of population 6–12.

(*c*) **Secondary.**—(i) *State Liceos :* 41 for boys, 38 for girls; enrolment 16,000 and 13,000; six years, 12–18. (ii) *Private Liceos*, subsidised by the Ministry: 36, enrolment 9,000. (iii) *Private independent :* 8 religious *Seminarios*, nine years, 9–18, enrolment 2,000; 27 other independent schools, enrolment 8,000. (i), (ii) and (iii) Attendance: 8 per cent. of population 12–18.

(*d*) **Vocational.**—(i) *State :* 10 *Institutos Comerciales*, two years, enrolment 3,700; 28 *Escuelas técnicas femininas*, two years, enrolment 5,000; 28 *Vocational Schools*, enrolment 9,000; 43 *Evening Schools*, enrolment 4,200; 3 *Technical Schools*, five years, enrolment 1,000; 2 *Technical Schools*, three years, enrolment 300; 4 *Agricultural Schools*, four years, enrolment 500. (ii) *Private :* subsidised, 14, enrolment 1,800; independent, 22, enrolment 3,300. (i) and (ii) Attendance: about 8 per cent. of population 12–16.

HIGHER EDUCATION.—(i) *Universities :* One State, 3,500 students; three R.C., 3,000 students; one technical college, R.C., 40 students. (ii) *Teachers' Training :* two *Escuelas Normales de Profesores* for men and four for women, 1,500 students. (iii) Academies of Music and Art.

EXAMINATIONS.—*Bachillerato* after six years of secondary school, admitting to the universities.

LANGUAGE.—Spanish.

CO-EDUCATION.—Four-year primary schools partly separate and partly co-educational; six-year primary schools, secondary schools and vocational schools separate. Universities co-educational.

RELIGION.—Public schools secular, religious instruction optional; private schools, R.C.

CHINA

(*See* YEAR BOOK, 1932, *pages* 950–70)

Population : 449,000,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education administering secondary and higher institutions. (*b*) *Provincial.* Departments of Education administering secondary and primary schools. (*c*) *Local.* Districts (*Hsien*) and counties (*Ch'u*) administer primary rural schools.

LEGISLATION.—The Government has prepared a bill for the gradual introduction of compulsory attendance for ages 6–10, but this policy cannot at present be realised.

FINANCE.—Central for universities ; provincial for secondary education ; local for primary schools.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens in the cities ; enrolment, 30,000.

(*b*) **Primary.**—(i) *Primary Schools*, four years, 6–10. (ii) *Higher Primary*, six years, 6–12. (i) and (ii) Enrolment about 9,000,000. Attendance : about 21 per cent. of population 6–10 and about 2 per cent. 10–12.

(*c*) **Secondary.**—No reliable data. From 2,000 to 14,000 schools with from 300,000 to 780,000 pupils. Six years, 12–18. Two departments : (*a*) *Junior Middle School*, 12–15, and (*b*) *Senior Middle School*, 15–18. Most schools have only the first department. Attendance : about 1 per cent. of population 12–18.

(*d*) **Vocational.**—(i) Professional sections of secondary schools. (ii) Post-primary vocational schools. (iii) Part-time courses for apprentices.

HIGHER EDUCATION.—(i) *Recognised Universities :* 49 with 34,000 students : 15 National (12,000), 17 Provincial (6,000), 17 Registered Independent (16,000). About 16 private unrecognised colleges with 6,000 students. (ii) *Technical Colleges :* 4 National and 8 Provincial, with 8,000 students. (iii) *Teachers' Training :* Normal schools, three years for graduates of junior middle schools, 15–18 ; *Teachers' Schools* for graduates of higher primary schools, 12–15. (iv) National Academies of Fine Arts and Music.

EXAMINATIONS.—" Credit " system in secondary schools. 186 credits in junior and 156 credits in senior middle schools admit to the universities.

LANGUAGE.—Many dialects. The Government is endeavouring to establish one national language (*Paihua*) and one accepted system of writing. In some universities, English.

CO-EDUCATION.—All schools co-educational.

RELIGION.—Public schools are secular ; civics obligatory. Independent universities are Christian.

COLOMBIA

Population : 8,000,000 [1]

ADMINISTRATION.—(*a*) *Central.* Ministry of National Education, administers federal territories and national institutions, and supervises the whole system, through directors subordinated to the Minister. (*b*) *Local.* 14 Provincial Departments of Education administer provincial institutions ; Municipal Councils administer urban primary schools.

LEGISLATION.—No compulsory attendance. Primary education free.

FINANCE.—(*a*) *Central :* federal institutions and grants to Departments. (*b*) *Provincial :* rural primary, secondary and higher schools. (*c*) *Municipal :* primary schools. 13 per cent. of expenditure central, 63 per cent. provincial, 24 per cent. municipal.

[1] Population : 10 per cent. Europeans, 15 per cent. Indians, 40 per cent. mestizos, 35 per cent. negroes and mulattos.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A few kindergartens in the cities, provincial and municipal.

(*b*) **Primary.**—(i) *Urban primary* schools, six years, 6–12, enrolment 250,000. (ii) *Rural primary* schools, three years, enrolment 240,000. A few private schools with 20,000 pupils. Attendance: about 40 per cent. of population 6–12.

(*c*) **Secondary.**—(*i*) *Colegios:* 94 public, about 100 private subsidised and about 140 private independent. (ii) 17 *Escuelas Normales*, provincial, serving as secondary schools for girls. Total enrolment about 25,000. Secondary schools six years, 12–18; normal schools four years; but many secondary schools nine years, including preparatory grades. Attendance: about 2 per cent. of population 12–18.

(*d*) **Vocational.**—38 professional and 40 industrial post-primary schools, enrolment 6,000. 3 national *Institutos* of secondary grade and 20 provincial.

HIGHER EDUCATION.—(i) *Universities:* One National, 4 Provincial, one National college, one R.C. university and one independent university. 3 technical national colleges. Enrolment 2,000. (ii) 2 national *Pedagogical Institutes.* (iii) *National Academies of Music and Art.*

EXAMINATIONS.—*Bachiller en ciencias* and *en letras*, after six years of secondary education, admitting to the universities.

LANGUAGE.—Spanish.

CO-EDUCATION.—In some primary schools, but not in secondary.

COSTA-RICA

Population: 516,000 [1]

ADMINISTRATION.—(*a*) *Central.* Secretariat of Public Education, controlling the whole system. (*b*) *Local.* Seven Provincial Boards of Education and, for primary schools, District Councils.

LEGISLATION.—Free and compulsory, 7–14.

FINANCE.—Centralised for secondary and higher education and for salaries of primary teachers; local for primary schools.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A few public kindergartens.

(*b*) **Primary.**—Seven years. Public. Attendance: about 70 per cent. of population 7–14.

(*c*) **Secondary.**—One *Liceo* for boys and one *Colegio* for girls. One *Escuela Normale.* Enrolment, 1,700. Five years, 12–17. Attendance: about 2 per cent. of population 12–17.

(*d*) **Vocational.**—2 *Colegios* and some professional schools.

HIGHER EDUCATION.—No university. One School of Law and one School of Pharmacy. Enrolment 210.

EXAMINATIONS.—*Bachiller*, admitting to higher schools.

LANGUAGE.—Spanish.

CO-EDUCATION.—Secondary schools are separate.

RELIGION.—Public schools are secular.

CUBA

Population: 3,700,000

ADMINISTRATION.—(*a*) *Central.* Secretariat of Public Instruction and Fine Arts. (*b*) *Local.* Municipal Boards subordinated to the Secretariat.

LEGISLATION.—Free and compulsory 7–13.

THE SCHOOL SYSTEM.

(*a*) **Primary.**—460,000 in public and 33,000 in private schools. Eight years 6–14. Attendance: about 90 per cent. of population 7–13.

[1] Population 90 per cent. mestizos.

(*b*) **Secondary.**—(i) Six provincial *Institutos*, free, four years, after eight primary grades. (ii) Private *Colegios*, six years, after six primary grades. (iii) 12 *Normal Schools.*

(*c*) **Vocational.**—Industrial schools are being established by the law of 1929.

HIGHER EDUCATION.—One national university, enrolment 5,000.
EXAMINATIONS.—*Bachiller*, admitting to the university.
LANGUAGE.—Spanish.
CO-EDUCATION.—Primary schools are co-educational; secondary both separate and co-educational.
RELIGION.—Public, secular; private, R.C.

CZECHOSLOVAKIA

(*See* YEAR BOOK, 1932, *pages* 917–30; YEAR BOOK, 1933, *pages xciv–c*, 122, 125–6, 132)

Population : 14,730,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Schools and Public Instruction. A deputy of the Minister in Bratislava for Slovakia. (*b*) *Provincial.* Each of the five provinces (Bohemia, Moravia, Slovakia, Silesia and Russia) has a School Council. (*c*) *Local.* Each district and municipality has a School Council subordinated to the Ministry.
LEGISLATION.—Compulsory attendance 6–14. Part-time 14–17 in industrial centres. Free primary and intermediate education.
FINANCE.—State, secondary and higher; provinces, salaries of primary teachers; local, primary schools. Approximately: State 46 per cent., local 54 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Public kindergartens. Ages 3–6. Enrolment 105,000. Attendance: about 12 per cent. of population 3–6.

(*b*) **Primary.**—*Obečné Školy* or *Volksschulen*, eight years, 6–14. Attendance: about 80 per cent. of population 6–14. Public, and denominational with grants.

(*c*) **Intermediate.**—*Meštanske Školy*, or *Bürgerschulen*, three years, 11–14, in some schools four years. Attendance: about 40 per cent. of population 11–14, and 10 per cent. of population 6–14.

(*d*) **Secondary.**—(i) *Gymnasia* (32), *Realgymnasia* (144), *Reform-realgymnasia* (62), eight years, 10–18, or 11–19. *Realschools* (60), seven years, 10–17. Foreign *Gymnasia* (5) (2 Russian). By language, including normal schools: 272 Czechoslovak, 99 German, 8 Carpatho-Russian, 2 Russian, 10 Hungarian, 2 Polish. Enrolment 87,000. (ii) *Normal Schools*, 62; enrolment 8,500; serve also as secondary schools. Four years, based on intermediate schools. A certain number (73) of secondary schools are maintained by municipalities and private bodies with grants from the State, the remainder by the State. The first four years of the secondary schools are the same for all types of school. 75 per cent. of pupils free. Attendance (i) and (ii): about 4 per cent. of population 10–18.

(*e*) **Vocational.**—(i) *Compulsory.* Part-time continuation schools, from two to four years, 14–17. Attendance: about 20 per cent. of population 14–18. (ii) *Voluntary full-time :* agricultural, commercial, medical and other vocational schools, four years. Attendance: about 4 per cent. of population 14–18.

HIGHER EDUCATION.—(i) *Universities :* 3 Czechoslovak, one German, one Ukrainian. All State. Enrolment 20,750. 26 theological colleges, enrolment 1,600. *Technical Colleges :* 2 Czechoslovak, 2 German, enrolment 10,600. Agricultural and Mining 3, enrolment 1,000. (ii)

Music and Art Academies. (iii) *Adult Education.* Public authorities, central and local, spend about 15 per cent. of educational budget on adult education. Many popular universities and courses for adults, both public and independent, maintained by political and religious bodies.

EXAMINATIONS.—Entrance examination to secondary schools at 10. Matriculation after eight years of secondary school, admitting to the universities.

LANGUAGE.—Mother tongue for all. Primary and secondary in Czechoslovak, German, Russian, Hungarian or Polish. University Czech or German.

CO-EDUCATION.—Intermediate and secondary education, separate. Primary and university, co-educational.

RELIGION.—In public schools religious instruction separate, and exemptions are allowed. In the denominational primary schools of Slovakia (R.C. and Protestant) and of Sub-Carpathian Russia (Orthodox) religious instruction is obligatory for all.

DENMARK

(*See* YEAR BOOK, 1933, *pages xciv–c*, 801–21)

Population : 3,560,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education. (*b*) *Local.* County Council and Municipalities. In rural areas Parish Councils for primary schools.

LEGISLATION.—Free, compulsory attendance 7–14. Free secondary and university education, registration fees only.

FINANCE.—54 per cent. central, 46 per cent. local.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—No public kindergartens. About 8,000 in private schools, 3–7. Attendance about 2 per cent. of population 3–7.

(*b*) **Primary.**—Seven years, 7–14. 34 State, 3,900 communal and 571 private schools. 10 per cent. in private schools. Attendance : about 92 per cent. of population 7–14.

(*c*) **Intermediate.**—(i) *Mellemskole*, public middle school, four years, 11–15, after four primary grades. Enrolment 40,000. (ii) *Realskole*, four years of *Mellemskole* plus one year of *Realklasse*, 11–16. 153 communal and 122 private. Enrolment 5,800.

(*d*) **Secondary.**—*Gymnasium.* 33 State, 15 communal, 10 private. State grants. Three branches : classical, modern and science. Three years after *Mellemskole*, 15–18. Enrolment 4,700. Attendance in intermediate and secondary : about 5 per cent. of population 14–18.

(*e*) **Vocational.**—*Full-time :* Commercial Institute, Arts and Crafts Institute. *Part-time :* 161 continuation schools, enrolment 11,500 ; 800 evening schools, enrolment 17,000 ; 22 agricultural schools, enrolment 2,700. Attendance : about 11 per cent. of population 14–18.

HIGHER EDUCATION.—(i) *Universities :* 2 State and one State College of Engineering. One Veterinary Institute. Enrolment 4,000. (ii) *Teachers' Training.* 8 public and 12 private colleges, 2,000 students. (iii) *Adult Education. Folk High Schools*, State grants, 60 ; enrolment 6,500.

EXAMINATIONS.—(i) *Realexamen* at 15 and (ii) *Studenter-examen* at 18, admitting to the university.

LANGUAGE.—Danish, and in the province annexed from Germany 28 primary and 4 middle schools in German.

CO-EDUCATION.—All schools co-educational.

RELIGION.—All schools denominational. State Church, Lutheran.

DOMINICAN REPUBLIC (SAN DOMINGO)

Population : 1,000,000[1]

Administration centralised, but finance decentralised.

Legislation.—Primary education free and compulsory, but not enforced.

School System as in Spanish America. 887 primary, 18 secondary, 33 technical schools. Enrolment about 90,000. Attendance : about 45 per cent. of population 7–13. One State university.

Language.—Spanish.

ECUADOR

Population : 2,000,000[2]

ADMINISTRATION—(*a*) *Central.* Ministry of Public Instruction and its Superior Council. (*b*) *Local.* Provincial Councils subordinated to the Superior Council.

LEGISLATION.—Free, compulsory attendance 6–12, not enforced.

FINANCE.—About 95 per cent. central.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A few public kindergartens in the cities.

(*b*) **Primary.**—(i) *Elementary*, four years, 6–10, 78 per cent. of all primary schools. (ii) *Middle* (*medias*), six years, 6–12, 19 per cent., and (iii) *superior*, five years, 9–14, after the first three primary grades, 3 per cent. of primary schools. 1,640 State, 155 municipal and 212 (12 superior) private schools. Enrolment 150,000. Attendance : about 40 per cent. of population 6–12.

(*c*) **Secondary.**—15 *Colegios Nationales*, State, and 6 *Colegios*, private ; enrolment 2,200 and 300. Six years, 12–18, after six years of primary school. Attendance : about 1 per cent. of population 12–18.

(*d*) **Vocational.**—Special sections of secondary schools. One school of crafts and arts.

HIGHER EDUCATION.—(i) *Universities*: 3 State. Enrolment 850. (ii) *Teachers' Training* : 4 *Institutos Normales*, State, four years, 16–20, after graduating from superior primary school. Enrolment 1,000. (iii) Academies of Art and Music, State.

EXAMINATIONS.—*Bachiller*, after six years of secondary school, admitting to the universities.

LANGUAGE.—Spanish.

CO-EDUCATION.—Primary schools, partly separate and partly co-educational. Secondary schools, separate.

RELIGION.—Public schools, secular ; private, R.C.

EGYPT

(*See* YEAR BOOK, 1932, *pp.* 982–93)

Population : 14,000,000

ADMINISTRATION.—The Ministry of Education and its Inspectors administer the whole system. The provincial councils have no powers in educational matters.

LEGISLATION.—Compulsory part-time primary education, which is not enforced. Native primary schools free.

FINANCE.—72 per cent. central, 28 per cent. provincial.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—25 public infant schools with 2,200 pupils.

(*b*) **Primary.**—(i) *Native system* in classical Arabic. Ages 5–12

[1] Population : negroes and mulattos, few whites and Indians.

[2] Population : 60 per cent. Indians, 30 per cent. mestizos, 7 per cent. Europeans and 3 per cent. negroes.

theoretically, in practice much older. (*a*) Whole-time schools, 80 per cent. boys. Enrolment: 56,000 in State, 260,000 in local and 65,000 in private schools. (*b*) Part-time: enrolment 250,000 in State schools, mostly boys. (ii) *Europeanised system* in classical Arabic and one European language (usually English, sometimes French). Four or five years, 7–12, in practice much older. 80 per cent. boys. Enrolment: 25,000 in State, 20,000 in local and 47,000 in private subsidised schools. (i) and (ii) Attendance in all primary schools about 35 per cent. of population 7–12.

(*c*) **Intermediate.**—*Native system.* 37 schools in classical Arabic. Two years, 13–15. State schools; enrolment 4,000.

(*d*) **Secondary.**—*Europeanised system.* Five years, 12–17, in practice many above 20. Only one State school for girls, enrolment 200. Boys: 14,000 in State, 600 in local and 6,000 in private subsidised schools. Attendance: about 2 per cent. of population 12–17.

(*e*) **Vocational.**—(i) Arts and Crafts, Technical, Agricultural, and Commercial intermediate schools for boys only. From three to five years, ages 14–19 and much older. Enrolment in State schools, 5,500; in local, 3,000. (ii) Part-time courses, public, enrolment 2,000.

HIGHER EDUCATION—(i) *University.* One State (Cairo), 2,200; one School of Commerce, 400; one School of Agriculture, 280; one Veterinary School, 160; one School of Engineering, 580. (ii) *Teachers' Training. Primary.* 45 State colleges, three years, 15–18, native system. Enrolment: boys 8,500, girls 3,400. *Secondary.* Higher training college, Europeanised system, enrolment 1,100. (iii) National School of Fine Arts, 80. (iv) *Adult* courses, 27,000.

RELIGIOUS MOSLEM SYSTEM.—State grants. Seven primary schools, 5,300; five secondary, 2,500. One Arabic Moslem university, *Al-Azhar*, 1,700. 4–4–4 years.

EXAMINATIONS.—(i) *Primary Certificate* in Europeanised schools, after four primary grades; admission to secondary schools. (ii) First Part *Secondary Certificate* after three secondary grades and (iii) *Second Part Secondary Certificate* after five secondary grades, admitting to the university and higher schools.

LANGUAGE.—Classical Arabic throughout, different from native Arabic. In Europeanised schools English and French are also used. Foreign Schools: English, American, French, Italian and Greek.

CO-EDUCATION.—Separate.

RELIGION.—Native system denominational, Moslem. Europeanised, secular.

ESTONIA

Population: 1,116,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education administers the whole system except agricultural schools. According to the constitution the Russian, German and Jewish minorities have autonomous Departments within the Ministry. (*b*) *Local.* District Councils subordinated to the Ministry or to the Minorities' Departments in Russian-speaking areas.

LEGISLATION.—Full-time 7–12. Part-time 12–16, not enforced. Primary and continuation free.

FINANCE.—70 per cent. central, 30 per cent. local.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—17 local and 37 private kindergartens. Enrolment: 2,700. Ages: 3–8.

(*b*) **Primary.**—1,292 local and 29 private schools. Majority four years, minority six years, 8–14. Enrolment: 106,000. Attendance: 99 per cent. of population 8–12.

(*c*) **Secondary.**—79 *Gymnasia* (25 private subsidised). Six years, 12–18. Enrolment: 15,000. Attendance: about 10 per cent. of population 12–18.

(*d*) **Vocational.**—(i) *Part-time* continuation, two years, 14–16, 63 schools. Enrolment: 2,000. (ii) *Full-time*: 48 agricultural, commercial, domestic, trade and apprentice schools, two and three years. Enrolment: 5,000. (i) and (ii) Attendance: about 5 per cent. of population 14–16.

HIGHER EDUCATION.—(i) *University.* One, 3,700. One technical institute, 550. (ii) *Teachers' Training.* 7 Colleges, 850. Six years. (iii) Academies of Music and Arts. (iv) *Adult Education.* Sunday schools, Estonian and Russian. People's universities, Estonian and Russian.

EXAMINATIONS.—Matriculation after six years of secondary school, admitting to the university and technical institute.

LANGUAGE.—State language, Estonian. Russian, German, Yiddish, Swedish and Latvian minorities have schools, primary and secondary, in their mother tongue.

CO-EDUCATION.—Primary, co-educational. Secondary, partly separate and partly co-educational.

RELIGION.—Estonian and German schools, Protestant; Russian, Orthodox; Yiddish, Jewish.

FINLAND

(*See pages* 911–26 *of this volume*)

Population: 3,650,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education and its Superior Council with two sections: Finnish and Swedish for respective nationalities. (*b*) *Local.* Municipal Councils subordinated to the Superior Council.

LEGISLATION.—Compulsory attendance 7–13 or 14. Part-time up to 15. Free.

FINANCE.—Primary, communes and State; secondary and higher, State. 55 per cent. State, 45 per cent. local.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Communal kindergartens 3–7, enrolment 95,000. Attendance: about 27 per cent. of population 3–7.

(*b*) **Primary.**—*Communal, State grants.* A full school has six standards, two lower and four higher. (i) *Urban*, enrolment, 41,000. (ii) *Rural*, 359,000. (iii) *Supplementary course*, 2,000. Attendance: about 77 per cent. of population 7–14.

(*c*) **Secondary and Intermediate**, see pages 912–16.

(*d*) **Vocational.**—(i) *Part-time* continuation courses, two years, 14–16, enrolment 40,000. (ii) *Full-time*: 290 commercial, industrial, technical, arts and crafts, agricultural, dairy, domestic, horticultural and other schools. Enrolment: 16,000 (i) and (ii). Attendance: about 40 per cent. of population 14–16.

HIGHER EDUCATION.—(i) *Universities.* One State and two private (one Swedish), 6,000. One technical college, 750. Two Institutes of Commerce, 445. (ii) *Training Colleges*, 12; 4 two years and 8 five years; enrolment, 2,000. (iii) *Adult Education. Folk High Schools* 56, State grants; enrolment, 3,100.

EXAMINATIONS.—Matriculation after eight years of secondary school, admitting to the universities.

LANGUAGE.—The State is bilingual: Finnish and Swedish for respective nationalities. There are a few Russian primary schools for the Russian minority.

CO-EDUCATION.—All schools, with the exception of girls' *Lyceer*, co-educational.

RELIGION.—Denominational, Lutheran.

FRANCE

(*See* YEAR BOOK, 1932, *pages* 819–38 ; 1933, *pages lxxviii–ix, xciv–c*, 121–5, 128, 130, 724–32 ; *and pages* 927–35 *of this volume*)

Population : 41,000,000

ADMINISTRATION.—Centralised administration, no local education authorities. Ministry of National Education administers the whole system through seventeen appointed Rectors of Academy. Some technical schools and agricultural institutions under the respective Ministries. Each *Académie* divided into *Départements* under the appointed *Inspecteurs d'Académie*. Each *Département* into *Arrondissements* under the appointed *Inspecteurs Primaires*. The Ministry through *Inspecteurs Généraux* supervises the whole country.

LEGISLATION.—Compulsory attendance : full-time 6–13 ; part-time, for industrial occupations, 13–18, not fully enforced. Elementary, higher elementary and continuation schools free. Gradual introduction of free secondary education for all.

FINANCE.—Expenditure divided between the State and local communes, 77 per cent. central and 23 per cent. local.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—*Ecoles maternelles.* 14 per cent. of schools, providing for 8 per cent. of children, are private (R.C.) institutions. Free to all. Ages : 2–6. Attendance : 52 per cent. of population 3–6, 22 per cent. in the *Ecoles maternelles* and 30 per cent. in the Infant Departments of primary and secondary schools.

(*b*) **Primary.**—*Ecoles primaires élementaires.* Ages : 6–13. 15 per cent. of schools, providing for 19 per cent. of all primary pupils, are private (R.C.) institutions. Two-thirds of private schools are girls' schools. Attendance : 95 per cent. of population 6–13. All primary schools free.

(*c*) **Intermediate.**—*Ecoles primaires supérieures.* Ages : 13–16 or 18. All public institutions. One-third of schools are annexed to secondary schools. Free to all. Attendance : about 3 per cent. of population 13–16. Also *cours complémentaires* at ordinary primary schools. In addition, there are 429 Catholic schools of the same grade.

(*d*) **Secondary.**—(i) *Lycées.* State schools for boys. Total enrolment 88,000, of which 27,000 in infant and primary departments. 15,300 free places. (ii) *Collèges.* Communal schools for boys. State grants. Enrolment, 46,000, of whom 16,000 in infant and primary grades. (iii) *Lycées for Girls*, State, enrolment 39,000, of whom 15,500 in infant and primary grades. 5,000 free places. (iv) *Collèges for Girls*, communal, enrolment 19,000, of whom 7,000 in infant and primary grades. 2,300 free places. (v) *Cours sécondaires for Girls*, communal, enrolment 5,500 ; 2,000 in infant and primary grades. 700 free places. Ages : up to 18. (vi) *Independent Secondary Schools.* Mostly R.C., some Protestant. On the lines of *Collèges.* Enrolment about 150,000. (i)–(vi) Attendance : about 5 per cent. of population 11–18.

(*e*) **Vocational.**—(i) *Compulsory* : part-time. *Cours professionels.* Communal, State grants (see under Legislation). Attendance : about 6 per cent. of population 13–18. (ii) *Voluntary*, full-time. State schools : *Ecoles pratiques de commerce et d'industrie, Ecoles de métiers*, ages : 13–16 ; *Ecoles nationales d'arts et métiers, Ecoles centrales d'arts et metiers, Ecoles supérieures de commerce, Conservatoire des arts et metiers*, and other schools, ages : 17–20. Attendance : about 3 per cent. of population 13–16, and 1 per cent. 17–20.

HIGHER EDUCATION.—(*a*) *Universities* 17 ; *Grandes Ecoles du Government* (under various Ministries) 10 ; *Roman Catholic Universities* 5 ; *Theological Colleges* 3, the last two independent. Enrolment : State,

95,000; Independent, 5,000. (*b*) *Teachers' Training. Ecoles normales primaires* and *Ecoles normales superieures.* Three-year course based on higher primary school. *Ecoles normale, supérieures* based on *Ecole normale primaire* for teachers in the latter. (*c*) Music and Art Academies. (*d*) *Adult Education* does not exist as an organised movement.

EXAMINATIONS.—(*a*) *Certificat d'études primaires,* taken at 12, exempting from further attendance at elementary school. (*b*) *Brevet élémentaire* taken at the age 15–16 in *Ecole primaire superieure,* or *cours complémentaire,* admitting to the training colleges. (*c*) *Baccalauréat,* based on secondary schools, admitting to the universities.

LANGUAGE.—French throughout, with the exception of Alsace-Lorraine, where primary schools use German as second language.

CO-EDUCATION.—Pre-school, co-educational; primary, secondary and vocational, separate; universities, co-educational.

RELIGION.—All State schools secular, *instruction morale et civique* obligatory. Independent schools denominational, majority R.C. In Alsace-Lorraine State schools are partly secular and partly denominational.

GERMANY

(*See* YEAR BOOK, 1932, *pages* 839–57; 1933, *pages lxxx,* 114–15, 117–18, 123, 126–9, 131–2)

Population : 63,000,000

ADMINISTRATION.—(*a*) *Federal.* Education Department, Ministry of Interior. A Federal Council representing the seventeen States (*Ausschuss für das Unterrichtswesen*). (*b*) *States.* In the larger units, the Ministry of Education; in the smaller, the Board of Education under the Ministry of the Interior or the Senate. Technical Education commonly under Ministry of Commerce or Industries. (*c*) *Local Authorities.* Prussia and Bavaria are the only States where large powers are delegated to local councils; elsewhere they are little more than agents.

LEGISLATION.—(*a*) *Federal.* Compulsory Attendance: full-time, eight years based on a common *Grundschule*; part-time, up to 18; (Weimar Constitution, not yet fully enforced; Federal Education Act, 1920, regulating *Grundschule*). Elementary and continuation education free. (*b*) *States.* Compulsory Attendance: full-time, commonly 6–14, but in Bavaria and Württemberg sometimes 6–13 and Schleswig-Holstein 6–15; part-time, not fully enforced, commonly 14–17, 8 lessons a week for 40 weeks in working hours.

FINANCE.—With the exception of a few Federal institutions, education is financed by the States. In the larger, about half the cost is met from local taxation.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens provided by private enterprise and by some communes. No State grants. Attendance: about 14 per cent. of population 3–6.

(*b*) **Primary.**—*Grundschule,* 6–10, exceptionally 6–9; *Volksschule,* 10–14. Nearly all public institutions; attendance strictly enforced.

(*c*) **Intermediate.**—Various types: *Bürgerschule, Stadtschule,* but especially more modern *Mittelschule*; normal ages, 10–16. Also advanced divisions of *Volksschule* and preparatory schools for upper forms of secondary schools, e.g. *Realschule* for *Oberrealschule.* Moderate fees, except in advanced divisions of *Volksschule.* Mostly public institutions. Commonly one foreign language, with optional second from third year. Attendance: about 5 per cent. of population 10–16.

(*d*) **Secondary** (figures in brackets show number of institutions in Prussia).—(i) NINE-YEAR SCHOOLS (*VOLLANSTALTEN*): *Gymnasium,* two ancient and one modern language (306); *Realgymnasium,* Latin and two modern languages (119); *Oberrealschule,* two modern languages and

drawing (234); *Deutsche Oberschule*, two languages, of which one may be Latin, emphasis on German culture (6); *Reformgymnasium* (28) and *Reformrealgymnasium* (128), beginning ancient languages early in the fourth form; *Oberlyceum*, girls' schools (472). (ii) SIX-YEAR SCHOOLS. The first six years of any of the schools under (i) may form a course in themselves. In addition, there is the *Aufbauschule* (99), 13–19, based on the *Volksschule*, specially designed for gifted rural pupils, normally with curriculum similar to *Oberrealschule* or *Deutsche Oberschule*. (i) and (ii). In Prussia 352 secondary schools are maintained by the State, 436 by local authorities with State aid; 212 are private, mainly for girls. Fees, about 200 R.M. (£10 at par); about 10 per cent. free places; 10 per cent. half-fees; 15 per cent. three-quarter fees. Attendance in Germany as a whole: about 6 per cent. of population 10–19.

(*e*) **Vocational.**—(i) COMPULSORY: part-time *Berufsschule* or *Fortbildungsschule* (see under LEGISLATION above). Attendance: about 50 per cent. of population 14–18. (ii) VOLUNTARY: *Fachschule*, usually full-time, 16–18 or 16–20, mostly public institutions; *Handelsschule*, commercial schools, technically classed as *Fachschulen* but approximating to secondary schools. Attendance: about 7 per cent. of population 16–20.

HIGHER EDUCATION.—(*a*) *Universities* 23, *Hochschulen* 34 (10 Technical, 5 Commercial, 4 Agricultural, 2 Mining, 12 Theological, 1 Medical). All maintained by State. Attendance: matriculated enrolment about 130,000. (*b*) *Teachers' Training*. The tendency is to close the old *Lehrerseminarien* and substitute university courses (as in Saxony, three-year course) or Pedagogical Academies based on secondary schools (as in Prussia, two-year course). Wurttemberg and Bavaria still retain the *Lehrerseminarien* (three-year course following on three-year preparatory training schools). (*c*) Music and Art Academies. (*d*) *Adult Education*. *Volkshochschulen*, partly State-aided and inspected, partly independent.

EXAMINATIONS.—(*a*) Intermediate Certificate (*Mittlere Reife* or, in secondary schools, *Obersekundareife*) based on ten years' education from the beginning of the *Grundschule*. Normal entrance requirement for *Fachschule*, but with many exceptions. (*b*) Matriculation Certificate (*Reifezeugnis*) based on thirteen years' education. Entrance requirement for all universities, *Hochschulen* and liberal professions.

LANGUAGE.—German throughout, but there are primary schools for Danes in Schleswig, Poles in Silesia and Lusatians in Saxony in their mother tongues.

CO-EDUCATION.—Kindergartens, co-educational. Primary schools, partly co-educational and partly separate. Intermediate, secondary and *Fachschulen*, separate. Universities, co-educational.

RELIGION.—The majority of primary schools are denominational: R.C., Protestant and Jewish. A minority are " simultaneous " (i.e. right of entry) with separate denominational instruction. A small number are secular. Intermediate, secondary and higher schools are " simultaneous."

Note.—The above represents the German system existing before the inauguration of the National-Socialist régime.

GREECE

(*See* YEAR BOOK, 1933, *pages xciv–c*)

Population : 6,200,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education and Religious Affairs administers the whole system, except the commercial and vocational schools under the Ministry of National Economy and agricultural schools under the Ministry of Agriculture. Refugee orphanages under the Ministry of Hygiene and Public Welfare. (*b*) *Local.* District Boards of State officials subordinated to the Ministry.

FINANCE.—Centralised.

LEGISLATION.—Free, compulsory attendance 6–12.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—(i) *Public :* 361 schools ; 15,763 pupils. (ii) *Private :* 46 ; 1,725. Ages : 3–6. Attendance : about 4 per cent. of population 3–6.

(*b*) **Primary.**—(i) *Public :* 7,735 schools ; 656,500 pupils. (ii) *Private :* 280 ; 26,600. Ages : 6–12. Attendance : about 80 per cent. of population 6–12.

(*c*) **Intermediate.**—(i) *Hellenic Schools* (Ἑλληνικὰ Σχολεῖα), public : 427 schools ; 54,935 pupils. (ii) *Girls' Schools* : 22 ; 3,573. (iii) *Progymnasia* (Ἡμιγυμνάσια), public : 58 ; 2,956. Three years after primary school, 12–15. Attendance : about 15 per cent. of population 12–15.

(*d*) **Secondary.**—(i) *Public. Gymnasia* : 147 ; 35,593. *Real Schools* (Πρακτικὰ Λύκεια), 13 ; 1,914. (ii) *Private.* 128 secondary schools with 5,317 pupils. (i) and (ii) Six years, 12–18, after primary school. Attendance : about 5 per cent. of population 12–18.

(*e*) **Vocational.**—(i) Agricultural : 16 public, 5 private ; 680 pupils. (ii) Commercial : 25 public, 35 private ; 5,900. (iii) Fine Arts : 36 ; 3,800. (i), (ii) and (iii) Three to four years after primary, 12–16. Attendance : about 2 per cent. of population 12–16.

HIGHER EDUCATION.—(i) *Universities :* two State. Enrolment : 6,550. *Polytechnic :* 430. Higher School of Commerce : 490. Agricultural Institute : 112. (ii) *Teachers' Training :* six years. Seven normal schools for kindergartens, 25 for primary and one for secondary teachers. Enrolment : 4,000. (iii) Academy of Fine Arts.

EXAMINATIONS.—Entrance to secondary school, and Matriculation after six grades of secondary school.

LANGUAGE.—Modern Greek. In two American colleges, English, and in 42 French schools (10,000 pupils), French.

CO-EDUCATION.—All schools with few exceptions co-educational.

RELIGION.—Denominational, Greek Orthodox.

GUATEMALA

Population : 2,000,000[1]

ADMINISTRATION.—(*a*) *Central.* Secretariat of Public Education and its National Council administer the whole system. (*b*) *Local.* Education Committees for primary education subordinated to the Secretariat.

LEGISLATION.—Compulsory attendance 7–14, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—*Escuelas de Parvulos,* quite recently instituted. A very few in the cities.

(*b*) **Primary.**—(i) Schools for native Indians, speaking native dialects, *Escuelas de Castellanizacion.* Teach Spanish ; 1,400 schools with 27,000 pupils. All ages. (ii) *Escuelas Primarias.* Two cycles of three years each : *Elementales* and *Complementales.* About 93,000 in State schools and 12,500 in private schools. Ages : 7–13. Attendance : about 40 per cent. of population 7–14.

(*c*) **Secondary.**—(i) *Institutos Nacionales,* 8 ; and (ii) Private *Colegios.* Five years, 13–18, after six primary grades. Enrolment : 600.

(*d*) **Vocational.**—Commercial, public and private ; Arts and Crafts ; two years. Enrolment : 2,000.

HIGHER EDUCATION.—(i) One State *University.* Enrolment : 560. (ii) *Teachers' Training. Escuelas Normales Primarias,* 14. Enrol-

[1] Population : 60 per cent. pure Indians ; the rest mestizos ; very few Europeans.

ment: 1,300. Four years. *Escuelas de Preceptores*: 7 for rural teachers, two years. Enrolment: 100. *Escuela Normal Superior*: Two years after primary normal, for lecturers. (ii) *Adult Illiteracy Courses*; enrolment, 105,000. (iii) Academy of Fine Arts.

EXAMINATIONS.—Entrance to secondary schools; and *Bachiller en ciencias* or *en letras*, after five years of secondary school.

LANGUAGE.—Spanish, and in native schools native dialects for beginners.

CO-EDUCATION.—Primary schools partly co-educational and partly separate; secondary, separate.

RELIGION.—Public schools secular; private R.C.

HAITI

Population: 2,300,000[1]

ADMINISTRATION.—Department of Public Instruction.

LEGISLATION.—Free, compulsory attendance 7–14, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Primary.**—(i) *Public*: 417 rural schools, 25,400 pupils; 240 urban, 24,500. (ii) *Religious orders*: 115 rural, 6,000; 48 urban, 13,200. (iii) 85 *Private* urban, 5,520. Rural six grades, urban eight grades (theoretically). Attendance: about 27 per cent. of population 7–14.

(*b*) **Secondary.**—Six national *Lycées* and eleven private *Collèges*. Enrolment: 4,250. Six years, 13–19. Attendance: about 1 per cent. of population 13–19.

(*c*) **Vocational** schools, enrolment about 4,000.

HIGHER EDUCATION.—(i) Medical School, 200. (ii) Two normal schools.

EXAMINATIONS.—(i) *Brevet élémentaire* after six grades of primary. (ii) *Brevet supérieure* after nine grades of primary (6 and 3 *complémentaire*), and (iii) *Baccalauréat* after six years of secondary.

LANGUAGE.—Créole French.

CO-EDUCATION.—Prohibited by law.

RELIGION.—Public secular; private R.C.

HONDURAS

Population: 775,000[2]

ADMINISTRATION.—(*a*) *Central.* Secretariat of Public Instruction. (*b*) *Local.* Governors of 17 Provinces, appointed by central Government, and Municipal Councils, subordinated to central Secretariat.

LEGISLATION.—Free, compulsory attendance 7–15, not enforced.

FINANCE.—Central 55 per cent., municipal 45 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—One kindergarten, 300 pupils.

(*b*) **Primary.**—(i) *Rural*, two years, 400 schools; and (ii) *Urban*, from three to five years, 530. Only 18 private schools. Ages: 7–12. Attendance: 43 per cent. of population 7–15.

(*c*) **Secondary.**—(i) Five *Colegios Nacionales* (boys) and two private *Colegios*, 400 pupils. Five years, after five primary grades, 12–17. (ii) Four *Escuelas Normales*: four years, 500.

(*d*) **Vocational.**—Commercial schools, 240 pupils.

HIGHER EDUCATION.—One university, 100 students.

EXAMINATIONS.—*Bachiller en ciencias* or *en letras*, after five years of secondary school.

LANGUAGE.—Spanish.

[1] Overwhelming majority of population negroes and mulattos.

[2] Population mixed, Indians, mestizos, some negroes, very few Europeans.

CO-EDUCATION.—Primary schools party co-educational and partly separate; secondary separate.

RELIGION.—Public schools, secular; private, R.C.

HUNGARY

(*See* YEAR BOOK, 1933, *pages xciv–c*; 822–34)

Population : 8,700,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education. (*b*) *Local.* Parish School Boards (secular) for public primary and Church Boards for denominational primary schools, subordinated to the Ministry. Municipal Councils.

LEGISLATION.—Free, compulsory attendance, full-time 6–12, part time 12–15.

FINANCE.—Primary schools partly local and partly central; secondary and higher education central.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—1,013 kindergartens, public and private, 116,000 pupils. Attendance : about 23 per cent. of population 3–6.

(*b*) **Primary.**—1,193 State, 791 local, 2,812 R.C. Church, 169 Orthodox Church, 1,494 Protestant Churches, 157 Jewish and 142 private. Pupils, 766,771. Ages : 6–12. Attendance : about 80 per cent. of population 6–12.

(*c*) **Intermediate.**—City Schools (*Bürgerschulen*), four years, 10–14, after first four primary grades; 377 schools, 69,700 pupils. Attendance : about 11 per cent. of population 10–14.

(*d*) **Secondary.**—(i) *Gymnasia* : 156 schools, 13,632 pupils. (ii) *Real Gymnasia* : 69 schools, 27,232 pupils. (iii) *Real Schools* : 23 schools, 7,976 pupils. (iv) *Girls' Gymnasia and Lyceums* : 36 schools, 11,955 pupils. (i)–(iv) Eight years 10–18. About half State, half R.C. and Protestant Churches; a few municipal and private. Attendance : about 5 per cent. of population 10–18.

(*e*) **Vocational.**—(i) Compulsory part-time continuation schools, three years, 12–15. Majority with an agricultural bias. Schools, 5,645; pupils, 246,000. Attendance : about 55 per cent. of population 12–15. (ii) *Full-time.* Agricultural, industrial, commercial schools. 12–16. Attendance about 15 per cent. of population 12–16.

HIGHER EDUCATION.—(i) *Universities* : Four, all State; Technical institutes two; seven colleges. Enrolment : 16,000. (ii) Academies of Music and Arts. (iii) *Teachers' Training* : Five years. Enrolment : 7,000. (iv) *Adult Education.* Subsidised by State, not very much developed.

EXAMINATIONS.—Entrance to secondary schools at 10, and Matriculation at 18, admitting to the universities.

LANGUAGE.—State language, Hungarian. There are primary schools for minorities (German, Slovak, Rumanian).

CO-EDUCATION.—Primary schools 93 per cent. co-educational, 7 per cent. separate; secondary separate.

RELIGION.—Public schools "simultaneous," religious instruction separate. Private schools denominational, R.C., Protestant, Orthodox and Jewish.

ICELAND

Population : 100,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Justice and of Ecclesiastic Affairs appoints Superintendent of Education. (*b*) *Local.* Municipal Councils and Rural District Committees.

LEGISLATION.—Compulsory attendance in towns 7–14, in rural communities 10–14.

FINANCE.—Primary schools : local, 25 per cent.; secondary and higher central, 75 per cent. (Grants to communes.)

THE SCHOOL SYSTEM.

(*a*) **Primary.**—No kindergartens. (i) Fixed primary schools: 61 schools, 5,430 pupils, seven years. (ii) Itinerant primary schools: 168 schools, 3,179 pupils, four years. Attendance: about 60 per cent. of population 7–14 (7–10 not compulsory in rural areas).

(*b*) **Secondary.**—One *Lyceum* (213 pupils), three *Realschools* (319 pupils). Four years, 14–18. Free. Attendance: about 6 per cent. of population 14–18.

(*c*) **Vocational.**—Two agricultural, three technical, two domestic, one navigation, one mechanics, one commercial, one midwifery. Enrolment: 680. Attendance: about 7 per cent. of population 14–18.

HIGHER EDUCATION.—(i) One university. Enrolment: 150. (ii) Normal School. Enrolment: 43. (iii) Folk High Schools, 6. Enrolment: 380.

EXAMINATIONS.—Entrance to secondary school, and matriculation admitting to the university.

LANGUAGE.—Icelandic (Norse).

CO-EDUCATION.—All schools co-educational.

RELIGION.—All schools denominational, Lutheran.

IRAQ

Population: 3,000,000

ADMINISTRATION.—Centralised. Ministry of Education administers the whole system.

LEGISLATION.—No compulsory attendance.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Four kindergartens in the cities.

(*b*) **Primary.**—(i) State. 276 schools for boys (30,000 pupils) and 49 for girls (8,000). Four elementary grades plus two primary grades. Ages: 7–13. (ii) Denominational schools, grants from the State. 49 (20 Christian, 14 Jewish), 12,300 pupils. Some of these schools include intermediate grades as well. Attendance: about 11 per cent. of population 7–13.

(*c*) **Intermediate.**—State. 16 for boys (2,000 pupils) and 3 for girls (300). Three years after primary, 13–16.

(*d*) **Secondary.** State. Three boys' schools, 500 pupils. Two years after intermediate, 16–18.

(*e*) **Vocational.**—Two technical schools, 140 pupils; one School of Engineering of a higher grade.

HIGHER EDUCATION.—No university. Two training colleges for primary teachers and one for secondary teachers. One School of Law and one School of Medicine. Enrolment: 500 in all institutions.

EXAMINATIONS.—Entrance to intermediate schools and Matriculation (State primary and State secondary examinations).

LANGUAGE.—Arabic. Turks, Kurds and other minorities have 87 State primary schools in their mother tongues.

CO-EDUCATION.—All schools separate.

RELIGION.—Public schools "simultaneous," with separate religious instruction. Denominational schools Moslem, Christian and Jewish. Ministry of *Auqaf* has some religious Moslem schools independent of the Ministry of Education.

ITALY

Population: 43,000,000

(*See* YEAR BOOK, 1932, *pages* 858–77; 1933, *pages xciv–c*, 129, 142)

ADMINISTRATION.—(*a*) *Central.* Ministry of National Education administers the whole system. (*b*) *Local.* Regional authorities appointed from the centre.

LEGISLATION.—Free, compulsory attendance 6–14. Enforced only 6–11 in the primary grades.

FINANCE.—Central 70 per cent., local 30 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—9,425 infant schools (one-third private), 745,933 pupils. Attendance: about 30 per cent. of population 3–6.

(*b*) **Primary.**—(i) *Public:* 114,344 schools, 4,382,185 pupils. (ii) *Private:* 2,613 schools, 168,000 pupils. (i) and (ii) Five years, 6–11; two cycles, junior 6–9 and senior 9–11. Attendance: about 95 per cent. of population 6–11; and about 10 per cent. 11–14 (attendance not enforced).

(*c*) **Intermediate.**—*Ginnasi isolati.* (i) *State* (*Governati*): 103 schools, 9,577 pupils; (ii) *Local Subsidised* (*Pareggiati e parificati*): 50 schools, 4,077 pupils; (iii) Private (*Privati*): 128 schools, 7,711 pupils. Four years, after primary school. Equivalent to the first four years of secondary school.

(*d*) **Secondary.**—(i) *Licei-ginnasi*: *Governati*, 174 schools, 60,079 pupils; *Pareggiati*, 35 schools, 7,485 pupils; *Privati*, 20 schools, 1,324 pupils. Eight years, four at *Ginnasi* and four at *Licei*. Classical syllabus. (ii) *Licei-scientifici: Governati*, 52 schools, 5,831 pupils; *Pareggiati*, 3 schools, 188 pupils; *Privati*, 3 schools, 281 pupils; four years after *Ginnasi*, scientific syllabus. (iii) *Instituti Magistrali* (Normal Schools): *Governati*, 92 schools, 28,137 pupils; *Pareggiati*, 36 schools, 3,197 pupils; *Privati*, 107 schools, 5,811 pupils. Seven years, serve also as secondary schools. (iv) *Instituti Tecnici* (technical secondary schools serving also as general secondary schools), eight years: *Governati*, 102 schools, 34,250 pupils; *Pareggiati*, 13 schools, 2,714 pupils; *Privati*, 78 schools, 4,750 pupils. (v) Private Secondary Schools of lower standard: Group II, 210 schools, 21,473 pupils; Group III, 40 schools, 3,603 pupils; convent schools, 2,200 girls in *Ginnasi* grades and 1,300 in *Licei* grades. (i)–(v) Total in State schools: 137,874 pupils; in subsidised schools, 17,661; in private schools, 50,000. Attendance: about 3 per cent. of population 11–19; 25 per cent. of places in State and 7 per cent. in subsidised are free.

(*e*) **Vocational.**—(i) Compulsory ages 11–14 in vocational grades VI–VIII of primary schools, 150,000 pupils. (ii) For ages 14–18: industrial schools (2,200), professional schools (5,750), nautical (1,100), arts (600), commercial (13,500), agricultural (3,100). Total, 26,000.

HIGHER EDUCATION.—(i) *Universities*: 10 State, 11 local with State grants, and 4 independent. Enrolment: 31,644. (ii) 8 Engineering, 3 Technical, 6 Agricultural, 10 Veterinary, 12 Economic and 9 Special Higher Institutes. Enrolment: 16,079. (iii) Academies of Music (6) and of Fine Arts (9). Enrolment: 3,000. (iv) *Teachers' Training.* Institutes, seven years—see *Instituti Magistrali* above. (v) *Adult Education.* Evening courses for workmen, subsidised and supervised by the Ministry or Fascist organisation *Opera Nazionale Dopolavoro.*

EXAMINATIONS.—Entrance to secondary schools and *Baccalauréat.* The latter does not admit to higher institutions without further examination.

LANGUAGE.—In primary grades local dialects are used side by side with Italian. German and Slovene minorities have no schools in their mother tongues, their schools having been prohibited since 1927.

CO-EDUCATION.—Partly co-educational and partly separate.

RELIGION.—Religious R.C. instruction obligatory in primary schools and optional in secondary; lay teachers appointed by secular authorities.

JAPAN

(*See* YEAR BOOK, 1933, *pages* 733–44)

Population (*Japan proper*): 65,000,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education administers the whole system. (*b*) *Local.* Governors, prefectures and municipalities subordinated to the Ministry.

LEGISLATION.—Free, compulsory 6–12. Nominally 6–14, but only six years' attendance is enforced.

FINANCE.—Central 30 per cent., local 70 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—372 public and 692 private kindergartens, 100,000 pupils. Attendance : about 3 per cent. of population 3–6.

(*b*) **Primary.**—(i) *Public.* Elementary schools, six years, 6–12, and higher elementary, two years, 12–14. Usually both schools combined. 25,600 schools, 8,200,000 pupils in elementary and 1,300,000 in higher elementary grades. (ii) *Private* elementary schools, about 1,500 with 260,000 pupils. (i) and (ii) Attendance : 88 per cent. of population 6–14 or 99 per cent. 6–12.

(*c*) **Intermediate.**—(i) *Middle Schools for Boys. Public,* 2 State and 434 local, 283,000 pupils ; 119 *private,* recognised by the Ministry, 65,000 pupils ; 140 *private,* unrecognised, 33,000 pupils. (ii) *Girls' High Schools. Public :* 2 State and 538 local, *private* 217, enrolment, 332,000. Boys' schools five years, 12–17, girls four or five. (i) and (ii) Attendance : about 10 per cent. of population 12–17.

(*d*) **Secondary.**—(i) *Higher Schools.* 25 State, 3 local and 4 private. State schools three years, 16–19, based on the fourth grade of middle schools ; local and private schools seven years, 12–19, combining middle and higher schools. Enrolment, 18,000. (ii) *Preparatory Schools of Universities,* 28, enrolment 19,000. Similar to higher schools. For boys only. (i) and (ii) Attendance : about 2 per cent. of population 16–19.

(*e*) **Vocational.**—(i) *Domestic Schools for Girls :* 213 (24 private), 30,000 pupils. Three years, 12–15. (ii) *Part-time continuation,* local, 15,360 schools, 1,182,000 pupils ; from two to four years, 12–16. (iii) *Full-time vocational* : technical, commercial, agricultural, nautical ; 877 schools, 250,000 pupils. Five years 12–17 or three years 14–17. (iv) Private schools about 60, 30,000 pupils. (i)–(iv) Attendance : part-time about 21 per cent. of population 12–16, full-time about 4 per cent. of population 12–17.

(*f*) **Special Schools.**—For graduates of middle schools, of standard between secondary and university. Medical, technical, linguistic, agricultural and commercial. 50 State, 7 local and 90 private. Enrolment : 77,000. Four years, 17–21.

HIGHER EDUCATION.—(i) *Universities :* 5 Imperial, enrolment 16,000 ; 6 State one-faculty colleges, enrolment 1,700 ; 4 local one-faculty colleges, enrolment 1,200 ; 22 private colleges, enrolment 14,000. (ii) *Normal Schools,* 105, enrolment 40,000. *Normal Schools* for secondary teachers, 11, enrolment 2,600. (iii) Academies of Music and Arts. (iv) *Adult Education :* local young men's institutes, ages 16–20, enrolment 800,000.

EXAMINATIONS.—Entrance to Middle Schools at 12 and Baccalauréat (*Gakushi*) after Higher Schools, admitting to the universities.

LANGUAGE.—Japanese, in some private institutions English.

CO-EDUCATION.—Primary schools, partly co-educational and partly separate ; intermediate, secondary, vocational and higher, separate.

RELIGION.—Public schools, secular ; morals and civics obligatory. Some private schools denominational.

LATVIA

Population : 2,000,000

(*See* YEAR BOOK, 1933, *pages xciv–c*)

ADMINISTRATION.—(*a*) *Central.* Ministry of Education for the whole system, except some vocational schools under the Ministries of Agriculture and Finance. Autonomous Departments of the Ministry for

the Russian, German, Jewish and Polish minorities. (*b*) *Local.* District and Municipal Boards.

LEGISLATION.—Free, compulsory 7–14.

FINANCE.—Primary schools, local (50 per cent. of teachers' salaries paid by State); secondary and higher schools, central.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Free public kindergartens, 3,000. Ages: 3–7. Attendance: 3 per cent. of population 3–7.

(*b*) **Primary.**—30 State, 1,830 local and 146 private. Enrolment, 188,000. Seven years, 7–14. Attendance: 94 per cent. of population 7–14.

(*c*) **Secondary.**—56 State, 27 local and 62 private. *Gymnasium*, classical, 6 years, 12–18; *Realgymnasium and Realschool* 4 years, 15–18. There are 16 Russian, 12 German, 22 Jewish, 3 Polish and one Lithuanian secondary schools, mostly private. Enrolment, 23,000. Attendance: about 21 per cent. of population 14–18.

(*d*) **Vocational.**—Commercial, technical, and other post-primary schools. Two and four years, 14–16–18. 113 schools, 11,000 pupils. Attendance: 10 per cent. of population 14–18.

HIGHER EDUCATION.—(i) University, State, enrolment, 8,600. (ii) Training Colleges 8, 1,800, five years, 14–19. (iii) Academies of Music and Arts.

EXAMINATIONS.—Entrance to secondary school at 14, and Matriculation at 18, admitting to the university.

LANGUAGE.—State language, Latvian. Russian, German, Jewish, Polish and Lithuanian minorities have primary and secondary schools in their mother tongues.

CO-EDUCATION.—Almost all schools co-educational.

RELIGION.—Public schools "simultaneous" with separate religious instruction. Some private schools denominational.

LIBERIA

Population: 2,000,000[1]

ADMINISTRATION.—State system under the Department of Interior. Denominational systems of Methodist, African Methodist and Episcopal Churches under separate superintendents, independent of the Government.

LEGISLATION.—No compulsory attendance.

FINANCE.—Public system centralised. Denominational system maintained by donations, mainly from United States.

THE SCHOOL SYSTEM.

(*a*) **Primary.**—51 State and 118 mission schools. Enrolment: 8,000. Attendance: about 6 per cent. of population 8–14.

(*b*) **Secondary.**—Three mission colleges, 300 students.

(*c*) **Vocational.**—One industrial and one agricultural school maintained by Methodists.

HIGHER EDUCATION.—One State college, 100 students.

LANGUAGE.—English.

CO-EDUCATION.—Partly co-educational and partly separate.

RELIGION.—Public schools, "simultaneous"; denominational schools admit non-Christians.

LIECHTENSTEIN

Population: 12,000

ADMINISTRATION.—Central and local authorities.

LEGISLATION.—Compulsory attendance 6–14.

FINANCE.—Central and local.

[1] Population: about 20,000 American negroes, the rest native Africans.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A few kindergartens.

(*b*) **Primary.**—*Alltagschulen*, eight years, 6–14. Enrolment: 2,000. Attendance: 100 per cent. of population 6–14.

(*c*) **Intermediate.**—Two schools, three years, 12–15, preparing for Swiss or Austrian secondary schools. Enrolment: 70.

(*d*) **Vocational.**—*Fortbildungsschulen*, part-time, 14–16. Enrolment: 400. Attendance: about 90 per cent. of population 14–16.

EXAMINATIONS.—Leaving Certificate of Intermediate Schools, admitting to foreign *Gymnasia*.

LANGUAGE.—German.

CO-EDUCATION.—All schools co-educational.

RELIGION.—Secular. Separate religious courses for three years, 14–17, optional (*Christenlehre*).

LITHUANIA

(*See* YEAR BOOK, 1933, *pages xciv–c*)

Population : 2,000,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education, administering the whole system. (*b*) *Local.* District and Municipal Councils have limited powers over their own schools.

LEGISLATION.—Compulsory attendance, 7–11.

FINANCE.—Centralised, small contributions from local authorities.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A few private kindergartens.

(*b*) **Primary.**—Public, four years, 7–11; enrolment, 282,000. Attendance: about 99 per cent. of population 7–11. Many pupils older than 11.

(*c*) **Intermediate.**—*Progymnasia.* 44 State and 30 private; four years, 11–15. Enrolment: 9,000.

(*d*) **Secondary.**—*Gymnasia* (classical, modern languages and science): State, 16. Private: 16 Lithuanian, 3 Polish, 13 Jewish, one German and one Russian. Eight years 11–19. Enrolment: 15,000. Attendance, intermediate and secondary: about 6 per cent. of population 11–19.

(*e*) **Vocational.**—60 Agricultural and other schools, enrolment, 6,000. Ages: 11–14.

HIGHER EDUCATION.—(i) State *University*, 4,000 students. (ii) State Agricultural Institute, 300 students. (iii) 12 Training Colleges, four years after *Progymnasia*, 1,500 students.

EXAMINATIONS.—Matriculation at 19, after eight years of *Gymnasia.*

LANGUAGE.—State language, Lithuanian. Polish, Jewish, German and Russian minorities have schools in their mother tongues, mainly private.

CO-EDUCATION.—Co-educational.

RELIGION.—Obligatory religious instruction in all schools, overwhelming majority R.C.

LUXEMBOURG

Population : 270,000

ADMINISTRATION.—Central and local authorities.

LEGISLATION.—Compulsory attendance 6–13.

FINANCES.—Secondary and vocational central, and central grants to local primary schools. 80 per cent. of cost of primary education is borne locally.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—*Ecoles gardiennes.* Public and private. Enrolment: 3,000. Attendance: about 22 per cent. of population 3–6.

(*b*) **Primary.**—(i) *Ecoles primaires*, public, seven years, 6–13. Enrolment: 30,000. Attendance: about 100 per cent. of population 6–13. (ii) *Ecoles primaires superiéures.* Two years, 13–15. Enrolment: 600.

(*c*) **Secondary.**—State. 3 *Gymnasia* (boys) and 2 *Lycées* (girls). Seven years, 11–18. Enrolment: 1,400. Attendance: about 5 per cent. of population 11–18.

(*d*) **Vocational.**—State. (i) *Ecoles industrielles et commerciales*, serving also as secondary schools, 2, 630 pupils. Seven years, 11–18. (ii) *Ecoles professionelles*, 800 pupils. (iii) Part-time *Ecoles complémentaires*, two years, 13–15. Enrolment: 6,300. Attendance: 5 per cent. in full-time, and about 80 per cent. in part-time continuation schools, of population 13–15.

HIGHER EDUCATION.—Eighth grade in secondary schools in Law, Engineering and Medicine, 50 students. Normal school, 50 students.

EXAMINATIONS.—Matriculation after seven years of secondary schools.

LANGUAGE.—Bilingual, German and French, German predominant.

CO-EDUCATION.—Primary and pre-school, co-educational. Secondary and vocational, separate.

RELIGION.—Public schools, partly secular and partly denominational.

MEXICO

Population : 16,400,000

ADMINISTRATION.—(*a*) *Federal.* Secretariat of Public Instruction administers the federal district and territories and rural schools for Indians in all States. (*b*) *States.* 28 independent State Departments of Education administering the State systems. (*c*) *Local.* Municipal Council in Mexico City.

LEGISLATION.—Compulsory attendance 6–12, not enforced.

FINANCE.—Federal 55 per cent., States 40 per cent., Municipal 5 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—300 private and 80 public kindergartens, 16,000 pupils. Attendance: about 2 per cent. of population 3–6.

(*b*) **Primary.**—(i) Federal rural schools for Indians. Three years, in some schools four years. All ages. 15,000 schools, 670,000 pupils. (ii) *Primary schools.* Federal 170,000, State and local 820,000, and private 175,000 pupils. Four years, 6–10, and six years, 6–12. Attendance: about 86 per cent. of population 6–12.

(*c*) **Secondary.**—6 federal, 42 State and 35 private. Enrolment: 23,000. Five years, 12–17. Attendance: about 2 per cent. of population 12–17.

(*d*) **Vocational.**—Federal, State and private. Professional schools 60, enrolment 10,000; industrial schools 170, enrolment 37,000; commercial schools 13, enrolment 4,000. Post-primary, two to four years. Attendance: about 5 per cent. of population 12–15.

HIGHER EDUCATION.—(i) 5 State Universities, enrolment 8,000; one State Polytechnic, enrolment 1,400. (ii) 58 Normal Schools, six years, 12–18, or three years, 17–20, after a secondary school. Rural teachers three years, 12–15. Enrolment: 8,000.

EXAMINATIONS.—Entrance to secondary at 12 and Matriculation after five years of secondary school.

LANGUAGE.—Spanish; Indian dialects used in federal rural schools.

CO-EDUCATION.—Partly co-educational and partly separate.

RELIGION.—All public schools, secular. Private schools, R.C.

NETHERLANDS

(*See* YEAR BOOK, 1933, *pages xciv–xcix* ; 769–76)

Population : 8,000,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education supervises the whole system. (*b*) *Local.* Municipal Councils and District School Boards administer primary education.

LEGISLATION.—Compulsory attendance 7–13. Primary schools not free, but poor pupils exempted from fees.

FINANCE.—Central 60 per cent., local 40 per cent.

THE SCHOOL SYSTEM.

All public schools are divided into secular (*openbare*) and denominational (*bijzondere*), both maintained by local authorities with grants from the State.

(*a*) **Pre-school.**—273 secular and 1,512 denominational (R.C. and Protestant) ; 38,000 and 137,000 pupils. Ages : 3–6. Attendance : about 39 per cent. of population 3–6.

(*b*) **Primary.**—3,600 secular, 474,000 pupils ; 4,600 denominational, 735,000. Seven years, 6–13. Attendance : about 99 per cent. of population 6–13.

(*c*) **Intermediate.**—*Higher Elementary Schools.* 262 public secular, 25,400 pupils ; 516 public denominational, 31,600. Four years, 12–16. Attendance : about 9 per cent. of population 12–16.

(*d*) **Secondary.**—(i) *Lycea.* 40, dating from 1910. The first two years common syllabus, then differentiation into *Gymnasia* (classical) and *Hogere Burgerscholen* (modern languages and science) ; see below. (ii) *Gymnasia.* 43 communal secular, 44 public denominational, 13 private denominational. Enrolment : 5,200 ; 4,340 ; 1,350 : total 10,890. Six years, 12–18. (iii) *Hogere Burgerscholen.* 49 State secular, 49 communal secular, 60 public denominational and 4 private denominational. Enrolment : 27,700. Five years, 12–17. (iv) *Schools for Girls.* 24 communal (no State grants) and 17 private denominational. Three to five years, 12–17. Enrolment : 3,840. Attendance all secondary : about 6 per cent. of population 12–18.

(*e*) **Vocational.**—(i) *Commercial Schools,* 45 (19 communal, 26 religious) : 3,000 ; three to five years, 12–17 ; serve as secondary schools also. (ii) *Technical Schools,* 13, enrolment 3,200. *Arts and Crafts,* 12, enrolment 2,000. *Navigation,* 12, enrolment 1,200. *Agricultural* lower, 35, enrolment 2,100. *Agricultural* secondary, 23, enrolment 1,000. (iii) Agricultural Courses, part-time, 160, enrolment 5,000. Commercial Courses, part-time, 120, enrolment 14,000. Industrial and professional schools, part-time, 620, enrolment 114,100. (i), (ii) and (iii) Attendance : about 38 per cent. of population 13–16.

HIGHER EDUCATION.—(i) *Universities :* Three State, one Municipal, one Roman Catholic and one Calvinist. Enrolment : 9,500. One Technical Institute, 1,700. One Agricultural Institute, 400. One Commercial Institute, 340. (ii) *Teachers' Training.* Normal schools : 30 State, 5 communal, 22 Protestant, 44 R.C. and 3 private. Enrolment : 11,400. (iii) Academies of Art and Music.

EXAMINATIONS.—Entrance to secondary school at 12 and Matriculation after six years of *Gymnasia.* Leaving certificate of *Hogere Burgerscholen* is accepted by technical institutes and medical and scientific faculties.

LANGUAGE.—Dutch.

CO-EDUCATION.—All schools co-educational except schools for girls.

RELIGION.—Public schools partly secular and partly denominational.

NICARAGUA

Population : 750,000 [1]

ADMINISTRATION.—(*a*) *Central.* Ministry of Public Instruction. (*b*) *Local.* Municipal Councils with very limited powers.

LEGISLATION.—Free, compulsory attendance 6–13. Not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Infant grade of primary 6–7, no separate institutions.

(*b*) **Primary.**—Six years, 6–12. About 600 schools, of which about 10 per cent. private. Attendance : about 35 per cent. of population 6–12.

(*c*) **Secondary.**—4 *Institutos Nacionales,* subsidised by the Government ; 5 private *Colegios* and 2 *Escuelas Normales.* Five years, 12–17. Attendance : about 2 per cent. of population 12–17.

(*d*) **Vocational.**—A few vocational schools, two years, 12–14.

HIGHER EDUCATION.—Three Law Schools and two Schools of Medicine.

EXAMINATIONS.—*Bachillerato,* admitting to the faculties.

LANGUAGE.—Spanish.

CO-EDUCATION.—Primary, partly separate and partly co-educational ; secondary, separate.

RELIGION.—Public schools secular, private R.C.

NORWAY

(*See* YEAR BOOK, 1933, *pages xciv–c*)

Population : 2,810,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Education and Religious Affairs. (*b*) *Local.* District and City School Boards for primary education.

LEGISLATION.—Free, compulsory attendance 7–14, in rural districts 7½–14.

FINANCE.—Central 50 per cent., local 50 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—A few private kindergartens in the cities.

(*b*) **Primary.**—Public. 773 urban, 98,000 pupils ; 5,800 rural, 301,600 pupils. Seven years, 7–14. Attendance : 97 per cent. of population 7–14.

(*c*) **Intermediate.**—*Middelskoler :* State 14, 3,104 pupils ; local 133, 13,625 pupils ; private 7,689 pupils. Three years, 14–17, direct continuation of the primary school. All State *Middelskoler* and about 30 local and private are connected with *Gymnasia* in the same buildings. Attendance : about 10 per cent. of population 14–17.

(*d*) **Secondary.**—*Gymnasia :* State 14, 2,076 pupils ; local 32, 2,442 pupils ; private 4, 242 pupils. Three of the State *Gymnasia* are rural with four years of instruction (295 pupils). City *Gymnasia* three years, 17–20, direct continuation of the *Middelskoler.* Three departments : classical, modern languages and science. Attendance : about 3 per cent. of population 17–20.

(*e*) **Vocational.**—(i) Full-time. *Commercial Schools :* one local, 253 pupils ; 6 private, 441 pupils ; post-primary. *Technical Schools :* 700 pupils. *Agricultural Schools :* 700 pupils. *Trade Schools :* arts and crafts and other vocational schools, 3,000 pupils. (ii) *Part-time. Continuation Schools :* 229, 3,700 pupils. *Evening Schools :* 4,000 pupils. Attendance : about 7 per cent. of population 14–17.

[1] Population : Europeans only 0·2 per cent., the rest mestizos, Indians and negroes.

HIGHER EDUCATION.—(i) One State University, 3,500 students; one Technical Institute, 700 students; one Agricultural Institute, 600 students. (ii) *Teachers' Training. Laererskolene :* 8 public, 218 students; 3 private (State-aided), 94 students; 2 private (non-State-aided), 70 students. Three years. (iii) One Academy of Arts. (iv) *Adult Education.* Public: *Fylkesskoler* (county schools) 35, 1,279 students. Private (State-aided): *Folkehoiskoler* 54, 2,613 students.

EXAMINATIONS.—Entrance to *Middelskoler*, entrance to *Gymnasia*, and Matriculation, admitting to the university.

LANGUAGE.—Two national languages: (i) *Riksmaal*-Dano-Norwegian, used in all cities and in the south. (ii) *Landsmaal* (derived from old Norse), used in rural districts. Rural *Gymnasia* in *Landsmaal*. Both languages are taught in all schools.

CO-EDUCATION.—All schools co-educational.

RELIGION.—All schools denominational, Lutheran. Religious instruction optional.

PANAMA

Population : 442,000 [1]

ADMINISTRATION.—Centralised. Secretary of Public Instruction.

LEGISLATION.—Free, compulsory attendance 7–15, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—No separate institutions.

(*b*) **Primary.**—Rural, three years, 7–10; urban, six years, 7–13. About 600 State and 70 private schools. Enrolment: 58,000. Attendance: about 80 per cent. of population 7–13.

(*c*) **Secondary.**—One State *Colegio*, 500 pupils; 2 State *Escuelas Normales*, 500 pupils; and 3 private *Colegios* (2 R.C. and 1 Protestant), 900 pupils. Attendance: about 4 per cent. of population 13–18.

(*d*) **Vocational.**—School of Arts and Crafts, 200 pupils.

HIGHER EDUCATION.—National Institute has higher courses in technical subjects, pharmacy and law.

EXAMINATIONS.—*Bachillerato*, admitting to higher courses.

LANGUAGE.—Spanish.

CO-EDUCATION.—Primary schools, co-educational; secondary, separate.

RELIGION.—Public schools secular, private R.C.

PARAGUAY

Population : 800,000 [2]

ADMINISTRATION.—Centralised. Ministry of Justice, Worship and Public Instruction.

LEGISLATION.—Free, compulsory, rural 9–14, urban 7–14, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens in the capital, 520 pupils.

(*b*) **Primary.**—733 State and 45 private schools. Enrolment: 105,000. Rural three years, urban six years, 7–13. Only 30 schools have the sixth grade. Attendance: about 80 per cent. of population 7–13.

(*c*) **Secondary.**—2 State *Colegios*, 4 private *Colegios* (3 R.C. and 1 Protestant), enrolment 1,400, six years 12–18. 7 *Escuelas Normales*,

[1] Population: 11 per cent. Europeans, 60 per cent. mestizos, 20 per cent. negroes, 8 per cent. Indians.

[2] Population: Europeans 8 per cent., the rest Indians and mestizos.

enrolment 720, four years. Attendance : about 2 per cent. of population 12–18.

(*d*) **Vocational.**—Agricultural State school, 60 students. Private subsidised commercial school, 400 students.

HIGHER EDUCATION.—State university, 450 students.
EXAMINATIONS.—*Bachillerato*, admitting to the university.
LANGUAGE.—Spanish (Indians speak Guarani).
CO-EDUCATION.—Separate.
RELIGION.—Public secular, private denominational, R.C.

PERSIA

Population : 10,000,000

ADMINISTRATION.—Centralised. Ministry of Science, Religion and Fine Arts.
LEGISLATION.—Compulsory from the age of 7, not enforced. Not free.
FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—No institutions.

(*b*) **Primary.**—(i) *State Schools* (60 per cent.), six years, 7–13. (ii) *Private* (40 per cent.), administered by State, six years, 7–13. (i) and (ii) Enrolment 100,000. (iii) *Foreign*, independent, combined with foreign secondary. (iv) Religious primary schools, *Mactabs*, enrolment 36,000. (i)–(iv) Attendance : about 9 per cent. of population 7–13.

(*c*) **Secondary.**—(i) State and private administered by State, six years for boys and five years for girls, 13–19. (ii) *Foreign* (American, English, French, Russian), enrolment with primary grades 8,000. Total secondary enrolment 9,600. (iii) Religious secondary and higher schools, enrolment 5,500. (i)–(iii) Attendance : about 1 per cent. of population 13–19.

HIGHER EDUCATION.—State Schools of Medicine, Law and Agriculture, and one Teachers' College. One American (Protestant) College. Enrolment : 300.
EXAMINATIONS.—State examination after six secondary grades.
LANGUAGE.—Persian. Foreign schools allowed to use foreign language as second language.
CO-EDUCATION.—Separate.
RELIGION.—All schools Moslem, except foreign schools.

PERU

Population : 5,500,000[1]

ADMINISTRATION.—Centralised. Ministry of Justice and Education.
LEGISLATION.—Free, compulsory, 7–14, not enforced.
FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Primary.**—(i) *Primary State*, five years, 7–12, enrolment 317,000. (ii) *Rural* for native Indians, enrolment 1,800. Attendance : about 50 per cent. of population 7–12.

(*b*) **Secondary.**—36 *Colegios* (State and private), enrolment 12,000. 4 *Normal Schools*, 1,600. Five years, 12–17. Attendance : about 2 per cent. of population 12–17.

HIGHER EDUCATION.—4 State universities, enrolment 2,100. One technical college, one agricultural and one engineering.
EXAMINATIONS.—*Bachillerato*, admitting to the universities.
LANGUAGE.—Spanish.
CO-EDUCATION.—Separate.

[1] Population : 13 per cent. Europeans, 58 per cent. Indians, 25 per cent mestizos.

POLAND

Population : 32,000,000

ADMINISTRATION.—Centralised. Ministry of Worship and Public Instruction administers the whole system except agricultural schools under the Ministry of Agriculture. Local authorities are the appointed " Curators " and Inspectors.

LEGISLATION.—Free, compulsory, 7–14.

FINANCE.—Central 78 per cent., local 22 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—About 1,600 kindergartens, public and private, 93,000 children. Ages : 4–7. Attendance : about 5 per cent. of population 4–7.

(*b*) **Primary.**—26,000 public and 1,000 private schools. Enrolment : 3,860,000 and 90,000. Seven years, 7–14. Attendance : about 95 per cent. of population 7–14.

(*c*) **Secondary.**—270 State, 65 local and 410 private *Gymnasia.* Enrolment : 102,000, 14,000 and 90,000. 63 per cent. of boys in State schools, 74 per cent. of girls in private schools. Eight years, 11–19, after four years of primary. Five upper grades differentiated : (1) classical, (2) modern languages, (3) science, (4) commercial. Attendance : about 5 per cent. of population 11–19. By the Law of 1932 *Gymnasia* are being reorganised : six years, 12–18, based on six years of primary 6–12, four upper grades differentiated.

(*d*) **Vocational.**—(i) Continuation schools, part-time, 14–17, enrolment about 130,000. (ii) Full-time, usually four years, 14–18 : technical, trade, agricultural, domestic, commercial. About 170 State and 300 private schools. Enrolment : 75,000. Attendance : about 8 per cent. of population 14–17 (5 per cent. part-time).

HIGHER EDUCATION.—(i) Universities. (*a*) *State* : 5 Universities, 2 Engineering, one Agricultural, one Mining, one Veterinary, one Dentistry, one Physical Education Institutes. (*b*) *Private* : 2 Universities, 4 Commercial Academies, one School of Political Science. Total enrolment : 48,000. (ii) Academies of Music and Arts. (iii) *Teachers' Training* : 150 State and 80 private colleges, five years 14–19. 36,000 students. (iv) Adult Education. Private bodies, subsidised by the Government, have courses and classes.

EXAMINATIONS.—Entrance to secondary school, and Matriculation after eight years of *Gymnasia,* admitting to the universities.

LANGUAGE.—Polish. Ukrainians, White Russians, Germans and Jews have public primary and private secondary schools in their mother tongues.

CO-EDUCATION.—All grades partly co-educational and partly separate.

RELIGION.—Public schools " simultaneous " (i.e. right of entry) and denominational, private schools denominational.

PORTUGAL

Population : 6,000,000

ADMINISTRATION.—Centralised. Ministry of Public Instruction administers the whole system.

LEGISLATION.—Free, compulsory attendance 7–11, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens in the cities.

(*b*) **Primary.**—Four years, 7–11. About 8,000 schools, enrolment 370,000. Attendance : about 65 per cent. of population 7–11.

(*c*) **Secondary.**—37 State *Liceus,* enrolment 15,000. Seven years

after primary, 11–18. Five grades common, two upper differentiated. Also private secondary schools, not recognised by the State.

(*d*) **Vocational.**—Technical, commercial, industrial and agricultural post-primary schools, usually three years, 11–14. Enrolment: 18,000.

HIGHER EDUCATION.—(i) 3 State universities, 5,000 students; one Commercial Institute, 800 students; one Technical Institute, 600 students. (ii) 5 Normal Schools for primary teachers, 800 students; 2 Normal Superior Schools (included in the universities). (iii) Academies of Music and Arts.

EXAMINATIONS.—Entrance to secondary at 11 and *Baccalauréat.*

LANGUAGE.—Portuguese.

CO-EDUCATION.—Separate.

RELIGION.—Public secular, private R.C.

RUMANIA

Population : 18,000,000

ADMINISTRATION.—Centralised. Ministry of Public Instruction.

LEGISLATION.—Free, compulsory 5–14, not enforced. Part-time 14–18, not enforced.

FINANCE.—Primary schools communal; teachers' salaries, and secondary and higher schools, central.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Ages 5–7, 1,500 public kindergartens, enrolment 100,000. Attendance: about 10 per cent. of population 5–7.

(*b*) **Primary.**—12,000 public (communal) and 4,000 church and private schools. 1,600,000 in public, 150,000 in private. Seven years, 7–14. Attendance: about 57 per cent. of population 7–14.

(*c*) **Secondary.**—*Lycées*, seven years, 11–18, after four years of primary. 55,000 pupils in State and 35,000 in Church and private schools. Attendance: about 3 per cent. of population 11–18.

(*d*) **Vocational.**—Commercial, domestic and industrial schools, after four years of primary, three years, 11–14, or 14–17. 64,000 pupils. Attendance: 4 per cent. of population 11–14.

HIGHER EDUCATION.—Four State universities, 30,400 students. About 50 training colleges. Academies of Music and Arts.

EXAMINATIONS.—Entrance to secondary school and *Baccalauréat.*

LANGUAGE.—Rumanian. Hungarian and German minorities have public schools in their mother tongues. Russians and Ukrainians have a few private schools. Jews, private schools in Yiddish. Turks and Bulgarians a few private schools.

CO-EDUCATION.—Primary schools partly co-educational and partly separate, secondary separate.

RELIGION.—Public schools "simultaneous" (i.e. right of entry), private denominational, R.C., Protestant and Orthodox.

SALVADOR

Population : 1,450,000 [1]

ADMINISTRATION.—Centralised. Ministry of Foreign Affairs, Justice and Public Instruction administers the whole system.

LEGISLATION.—Free, compulsory, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens in the capital.

(*b*) **Primary.**—913 State, 76 municipal and 45 private schools. Enrolment: 48,000, 4,000 and 4,400. Six years, 6–12. Attendance: about 26 per cent. of population 6–12.

[1] About 99 per cent. Indians and mestizos.

(*c*) **Secondary.**—One State *Instituto Nacional* 695 pupils; 17 private R.C. *Colegios*, 700 pupils. Five years, 12–17. Attendance: about 1 per cent. of population 12–17.

(*d*) **Vocational.**—One technical school.

HIGHER EDUCATION.—(i) One State University, 410 students. (ii) Two Normal Schools, 120 students. (iii) Academies of Arts and Music.

EXAMINATIONS. *Bachillerato*, admitting to the university.

LANGUAGE.—Spanish.

CO-EDUCATION.—Primary schools partly co-educational and partly separate; secondary separate.

RELIGION.—Public schools secular, private R.C.

SIAM

Population: 11,500,000

ADMINISTRATION.—Centralised. Ministry of Public Instruction.

LEGISLATION.—Free, compulsory, 7–14, not enforced.

FINANCE.—Primary, communal; secondary and higher, central. Central 52 per cent., local 48 per cent.

THE SCHOOL SYSTEM.

(*a*) **Primary.**—4,900 communal schools, 560,000 pupils; 700 private schools, 27,000 pupils. Seven years, 7–14. Attendance: 51 per cent. of population 7–14.

(*b*) **Secondary.**—(i) 300 State Schools. Five primary grades (7–12) plus eight secondary grades (12–20). 17,000 pupils in primary and 15,000 in secondary grades. (ii) 135 private schools, 4,200 pupils. Attendance: about 2 per cent. of population 12–18.

(*c*) **Vocational.**—Four State schools, post-primary, 600 pupils; 48 private schools, 1,500 pupils.

HIGHER EDUCATION.—State university, 300 students. Three training colleges.

EXAMINATION.—Entrance to secondary school and Matriculation.

LANGUAGE.—Siamese.

CO-EDUCATION.—Primary schools partly co-educational and partly separate; secondary separate.

RELIGION.—Almost all schools housed in monasteries. All schools denominational, Buddhist.

SPAIN

(*See pages* 891–910 *of this volume*)

Population: 23,500,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Public Instruction and Fine Arts administers the whole system. (*b*) *Local.* Fifty provincial Boards, organs of the Ministry. Communal committees for elementary education. *Catalonia* is autonomous.

LEGISLATION.—Six years' compulsory attendance between 3 and 14, usually 6–12. Free.

FINANCE.—Central 84 per cent., local 16 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Every commune with more than 10,000 inhabitants must maintain a free kindergarten.

(*b*) **Primary.**—About 28,000 public and 6,000 private schools. Enrolment about 3,800,000. Eight years, 6–14; usually six, 6–12. Attendance: about 76 per cent. of population 6–14.

(*c*) **Secondary.**—91 State *Institutos* and 74 other public secondary schools, six to seven years, 10 or 11–17, after four or five years of primary. Enrolment 118,000. 210 private schools, six years or more. Attendance: about 4 per cent. of population 11–17.

(*d*) **Vocational.**—Commercial schools, 6,000 pupils in State and 5,000 in private; technical schools, 22,000 and 4,000; three to five years, 12–16. Attendance: about 2 per cent. of population 12–16.

HIGHER EDUCATION.—(i) Twelve State Universities, 135,717 students; Private Academies, 22,000 students; State Technical Institutes, 3,000 students. (ii) *Teachers' Training.* Three years after five years of secondary school, 16–19. In State Colleges, 13,000 students; in private, 13,000. (iii) Academies of Music and Arts.

EXAMINATIONS.—Entrance to secondary school at 11, and *Bachillerato* admitting to the universities.

LANGUAGE.—Spanish. In Catalonia bilingual, Spanish and Catalan. According to the Republican Constitution the other provinces also have a right to public schools in their dialects.

CO-EDUCATION.—Partly separate and partly co-educational.

RELIGION.—Public schools secular; private R.C.

SWEDEN

(*See* YEAR BOOK, 1932, *pages* 903–16)

Population: 6,140,000

ADMINISTRATION.—(*a*) *Central.* Royal Central Board of Education administers the whole system. (*b*) *Local.* District and Parish Boards, with the participation of the clergy of the State Lutheran Church for primary education. Municipal Councils in the cities.

LEGISLATION.—Free, compulsory attendance 7–14; part-time 14–16.

FINANCE.—Central 58 per cent., local 42 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Two first years, 6–8, of primary schools are infant departments. No separate kindergartens.

(*b*) **Primary.**—675,000 pupils in public and 16,000 in private schools. Seven years, 7–14. Attendance: about 90 per cent. of population 7–14.

(*c*) **Intermediate.**—(i) Higher Elementary Schools (*Högre folkskoler*), one to four years, 13–17, after primary. 12,000 pupils in public schools. (ii) *Realskola*, five years (or six), 11–16; 10,000 pupils in public (communal) and 35,000 in private schools.

(*d*) **Secondary.**—*Gymnasia.*—State. 6,000 pupils. Three years after *Realskola*, 16–19. Attendance in intermediate and secondary: about 8 per cent. of population 11–19.

(*e*) **Vocational.**—(i) Compulsory part-time, 161,000 in public continuation schools, 14–16. (ii) Full-time: Technical Schools, 700 pupils; Commercial Gymnasia, 700; Private Technical Schools, 7,000; Apprenticeship Schools, 12,000. Attendance: part-time 38 per cent. of population, 14–18; full-time 2 per cent.

HIGHER EDUCATION.—(i) Universities: two State and two independent; one College and one Technical Institute. Enrolment: 7,700. (ii) Normal Schools, enrolment 2,000. (iii) Academies of Music and Arts. (iv) Adult Education: 53 Folk High Schools, 4,200 students.

EXAMINATIONS.—*Realskolexamen*, age 16; *Studentexamen*, age 19 admitting to the universities.

LANGUAGE.—Swedish.

CO-EDUCATION.—All schools co-educational.

RELIGION.—All schools Lutheran denominational.

SWITZERLAND

(*See* YEAR BOOK, 1933, *pages* 777–800, 115)

Population: 4,100,000

ADMINISTRATION.—(*a*) *Federal.* No federal Ministry of Education. The only federal school is the Zurich Polytechnic under the Ministry of the

Interior. (*b*) *Cantons.* Each of the 25 cantons has an independent Board of Education, administering its whole system. An annual Conference of all Directors of Education for co-ordination of practical measures. (*c*) *Local.* Municipal and Communal Councils.

LEGISLATION.—(*a*) *Federal.* Free, compulsory primary and part-time continuation attendance up to 18. (*b*) *Cantons.* Sixteen cantons begin at 6, nine at 7; three cantons end at 13, twelve at 14, and ten at 15. Part-time compulsory in 22 cantons, usually up to 18.

FINANCE.—Federal 5 per cent., cantons 49 per cent., local 46 per cent.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Ages 3–6. In Geneva and Basle, town cantonal kindergartens. In all other cantons, communal and private. Attendance: about 50 per cent. of population 3–6.

(*b*) **Primary.**—Communal schools with cantonal and federal subsidies. Usually eight years, 6–14, in some cantons 7–15. 4,400 schools, 472,000 pupils. Attendance about 99 per cent. of population 6–14.

(*c*) **Intermediate.**—(i) *Sekundarschulen.* Usually three years, 12–15. Cantonal and municipal. 644 schools, 48,000 pupils. (ii) *Realschulen,* 12–15 or 12–16, 103 schools, 14,000 pupils. (iii) *Progymnasien.* Four years, 12–16. 49 schools, 8,000 pupils.

(*d*) **Secondary.**—*Gymnasien.* Cantonal, municipal and private. About 40 per cent. private. 46 *Literargymnasien* (classics), 38 *Realgymnasien* and 30 with a scientific syllabus. In some cantons four years, 15–19; in some five years, 14–19; in some seven years, 12–19. Enrolment in five upper grades, 11,000. Attendance, intermediate and secondary: about 18 per cent. of population 12–19.

(*e*) **Vocational.**—(i) Compulsory *Fortbildung schulen,* part-time, 152,000 pupils (ii) *Full-time: Handel schulen,* 7,000 pupils; *Techniken,* 2,000; vocational, domestic and agricultural schools, 23,000. Post-primary. Attendance: about 45 per cent. part-time and about 9 per cent. full-time of population 14–18.

HIGHER EDUCATION.—(i) Federal Polytechnic at Zürich, 1,600 students. (ii) Eight Cantonal Universities, 9,000; one Commercial Institute, 200. (iii) *Teachers' Training:* 19 colleges and 25 departments in secondary schools, 2,500 students. (iv) Academies of Music and Arts in several cantons. (v) *Volkshochschulen* for Adults.

EXAMINATIONS.—Matriculation, admitting to the universities.

LANGUAGE.—19 German cantons, 3 French, 1 Italian and 2 bilingual. Mother tongue throughout for German, French and Italian Swiss; for Romance, only primary.

CO-EDUCATION.—Primary co-educational, secondary partly co-educational and partly separate.

RELIGION.—Public, "simultaneous" (right of entry) and denominational; private denominational R.C. and Protestant.

TURKEY

(*See* YEAR BOOK, 1932, *pages* 971–81)

Population: 13,700,000

ADMINISTRATION.—Centralised. The Ministry of Public Instruction administers the whole system. Thirteen regional superintendents, officials of the Ministry.

LEGISLATION.—Free, compulsory, 7–12, not enforced.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—73 State kindergartens, 8,000 pupils. Ages 4–7. Attendance: about 1 per cent. of population 4–7.

(*b*) **Primary.**—(i) 6,700 State schools, 480,000 pupils. Five years

7–12. (ii) 40 Private Turkish schools, 5,300 pupils. (iii) Armenian and Greek minority schools, private, 109 schools, 18,200 pupils. (iv) Foreign schools, primary and secondary (French, English, American, Italian), 71 schools, 11,000 pupils. Attendance: about 35 per cent of population 7–12.

(*c*) **Intermediate.**—*Middle schools*, three years, 12–15, 110 State schools, 20,000 pupils.

(*d*) **Secondary.**—*Lycées*, continuation of middle schools, three years, 15–18. 20 State *lycées*, 8,000 pupils.

(*e*) **Vocational.**—18 State schools, 3,200 pupils. Attendance all post-primary schools: about 2 per cent. of population 12–18.

HIGHER EDUCATION.—(i) State University, 4,700 students. (ii) School of Fine Arts, 200 students. (iii) 23 State Normal Schools, 6,700 students; five years, 12–17.

EXAMINATIONS.—(i) Leaving Middle School, and Matriculation after Lycée, admitting to the university.

LANGUAGE.—Turkish. In minority schools, Greek or Armenian. In foreign schools, English, French or other language.

CO-EDUCATION.—Primary partly co-educational and partly separate, secondary separate.

RELIGION.—Public system secular. Minority schools denominational, Orthodox or Armenian. Private Turkish, secular. Of the old Moslem educational system only two religious seminaries are left; all other schools were closed by the Government.

UNION OF SOVIET SOCIALIST REPUBLICS (RUSSIA)

(*See* YEAR BOOK, 1932, *pages* 931–937; 1933, *pages lxxxvii, lciv–c*, 745–768)

Population: 162,643,000

ADMINISTRATION.—(*a*) *Federal.* Federal Commissariats supervise vocational education. (*b*) *Republican.* 24 independent national Commissariats of Public Instruction. (*c*) *Local.* Provincial Boards (only in the R.S.F.S.R.), District Boards and Autonomous Areas of smaller nationalities, subordinated to respective Republican Commissariats.

LEGISLATION.—Compulsory attendance 8–12 in rural communities and 8–15 in industrial centres. Not enforced. Private schools prohibited by law.

FINANCE.—Union and Republics about 44 per cent. and local authorities about 56 per cent. of expenditure.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Kindergartens, children's homes (boarding), playing centres (summer months), 3–8. Attendance: about 2 per cent. of population 3–8.

(*b*) **Primary.**—*Four-years' School*, 8–12. Attendance: about 70 per cent. of population 8–12.

(*c*) **Intermediate.**—*Seven-years' School*, 8–15. *School of Peasant Youth*, 8–15; *School for Adolescents* (retarded ages). Non-proletarian parents pay fees according to income. Attendance: about 40 per cent. of population 12–15.

(*d*) **Secondary.**—(i) *School of the Second Grade*, five years, ages 12–17. (ii) *Nine-years' School*, ages 8–17. Vocational bias in the two upper grades. Non-proletarian parents pay fees according to income. (i) and (ii) Attendance: about 1 per cent. of population 15–17. (iii) *Workers' Faculties.* Full-time and part-time preparatory institutions for adult workers and peasants. Full maintenance. Four years. Preferential admittance to higher institutions.

(*e*) **Vocational.**—*Factory Schools*, three years, ages 15–18. *Technicum*, four years, ages 15–19. *Vocational Courses*, all ages from 15, part-time. Free. Attendance: about 3 per cent. of population 15–20.

HIGHER EDUCATION.—(*a*) *Higher Institutes :* Industrial, 243 ; Agricultural, 96 ; Economical, 58 ; Educational, 88 ; Medical, 38 ; Fine Arts, 14. Total enrolment in 1931, 272,125. (*b*) *Communist Universities* 27, enrolment about 10,000. (*c*) *Adult Education. Partisan Schools* for members of the Communist Party. *Centres for the Liquidation of Illiteracy* for peasants and workers. *People's Universities* for industrial population.

SCHOOL EXAMINATIONS.—Leaving certificates of all schools serve as entrance qualification for next higher grades. Examinations reintroduced in 1932.

LANGUAGE.—In principle, mother tongue for all nationalities. Primary schools in 70 languages, secondary in 30 languages, higher education in 5 languages.

CO-EDUCATION.—All schools co-educational by law.

RELIGION.—Instruction in religion prohibited even to private persons. All schools secular with marxist-atheist bias.

URUGUAY

Population : 1,900,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Public Instruction administers the whole system. (*b*) *Local.* 18 Departmental (Provincial) Commissions of Public Instruction : Inspector of the Ministry and four representatives of municipal councils.

LEGISLATION.—All State education free. Compulsory attendance 6–14.

FINANCE.—Centralised.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—State kindergartens 3–6, enrolment 20,000. Attendance : about 15 per cent. of population 3–6.

(*b*) **Primary.**—(i) State. 1,400 schools, 160,000 pupils. Rural three years, urban six years, 6–12 (two schools in the capital eight years, 6–14). (ii) Private. 160 schools, 20,000 pupils. Attendance : about 70 per cent. of population 6–12.

(*c*) **Secondary.**—*State* (i) 26 *Lyceos*, four years, 12–16. (ii) Six Preparatory Courses, two years after Liceos. Enrolment in secondary schools, 7,000. (iii) Private *Seminarios*, R.C. Number unknown. Attendance : about 3 per cent. of population 12–18.

(*d*) **Vocational.**—One school of Arts and Crafts, two agricultural schools and evening vocational schools, 8,000 pupils.

HIGHER EDUCATION.—(i) State University, 11,000 students. (ii) Four Normal Schools, six years, 12–18.

EXAMINATIONS.—After Liceos, *Suficiencia liceal* ; after two additional years, *Bachillerato.*

LANGUAGE.—Spanish.

CO-EDUCATION.—Public schools admit girls.

RELIGION.—Public secular ; private R.C.

VENEZUELA

Population : 3,200,000

ADMINISTRATION.—Centralised. Ministry of Public Instruction.

LEGISLATION.—Free, compulsory 7–14.

FINANCE.—About 70 per cent. Federal, 30 per cent. States and municipal.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—Since 1921 the Federal Government has established a number of kindergartens.

(*b*) **Primary.**—Very few private schools. 65 per cent. of schools are

Federal, the rest half State and half municipal. 1,900 schools, 112,000 pupils. Six years, 7–13. Attendance : about 26 per cent. of population 7–13.

(*c*) **Secondary.**—*Colegios*, four years, 13–17 ; *Liceos*, six years, 13–19. 18 State schools, 1,100 pupils. There are private R.C. schools. Attendance : less than 1 per cent. of population 13–19.

(*d*) **Vocational.**—10 vocational schools, 13,000 pupils.

HIGHER EDUCATION.—(i) Two State Universities and eight separate Faculties, about 1,000 students. (ii) Two Normal Schools, three years. (iii) Schools of Music and Arts.

EXAMINATIONS.—*Bachillerato* admitting to the university.

LANGUAGE.—Spanish.

CO-EDUCATION.—Primary partly co-educational and partly separate ; secondary separate.

RELIGION.—Public secular, but on request of more than ten parents religious instruction is provided. Private R.C.

YUGOSLAVIA

Population : 13,950,000

ADMINISTRATION.—(*a*) *Central.* Ministry of Public Instruction, the whole system. (*b*) *Local.* Provincial (*Banovin*) and communal councils subordinated to the Ministry.

LEGISLATION.—Free, compulsory 6–14. In Serbia actually only four years enforced ; in Croatia six years and in Slovenia eight years. Private schools prohibited by law.

FINANCE.—Primary, communal ; secondary and higher, central.

THE SCHOOL SYSTEM.

(*a*) **Pre-school.**—350 communal kindergartens, 30,000 pupils. Attendance : about 3 per cent. of population 3–6.

(*b*) **Primary.**—10,000 communal schools, 1,014,000 pupils. In Serbia four years, Croatia six years, Slovenia eight years, 6–14. Attendance : about 40 per cent. of population 6–14, in Slovenia more than 90 per cent.

(*c*) **Intermediate.**—*Bürgerschulen* (in old Austrian and Hungarian provinces) four years, 10–14. 160 schools, 26,000 pupils.

(*d*) **Secondary.** 200 *Gymnasia*, *Realgymnasia* and *Realschools*. Eight years, 10–18, after four primary grades. Enrolment : 86,000. Attendance intermediate and secondary : about 5 per cent. of population 10–18.

(*e*) **Vocational.**—(i) Part-time continuation, 86,000 pupils. (ii) Primary vocational (10–14), 630 schools, 65,000 pupils. (iii) Full-time post-primary (14–18) 40 schools, 7,000 pupils. Attendance : about 13 per cent. of population 10–14.

HIGHER EDUCATION.—(i) Three State Universities, two Faculties, one Commercial Academy, enrolment 16,600. (ii) 50 State Normal Schools, five years, 8,000 students. (iii) 14 Theological Colleges, 1,600 students.

EXAMINATIONS.—(1) Lower Matriculation after four intermediate grades and (2) Higher Matriculation after eight secondary grades, admitting to the universities.

LANGUAGE.—Serbo-Croat and Slovene. In German and Hungarian communities, mother tongue. Ten Russian gymnasia for Russian refugees.

CO-EDUCATION.—Partly co-educational, partly separate.

RELIGION.—All schools " simultaneous " (right of entry), with separate religious instruction for Orthodox, R.C. and Moslems.

SECTION III

Comparative Diagrams

INTRODUCTORY NOTE

IN the General Notes on Comparative Statistics in the YEAR BOOK for 1933 (page lxxxviii) attention was drawn to the difficulties of such statistics and to the pitfalls which should be avoided in comparing the data for different countries. The same qualifications should be borne in mind in studying the following diagrams.

Diagram I.—As pointed out in the YEAR BOOK for 1933, the comparison of *per capita* costs or costs per pupil has very little value in view of fluctuating rates of exchange, the different standards of living and the divergent classification of primary and secondary schools. But as there appears to be a general demand for such a table an attempt has been made to supply one. The figures have been arrived at from official reports, but unfortunately very few countries give detailed accounts of expenditure. Thus, in Germany, primary schools are grouped together with continuation schools and secondary schools with technical schools; while in Belgium, Holland and the Scandinavian countries secondary schools do not include municipal and communal schools, the figures being confined to State schools, where costs are considerably higher than in communal schools. In Scotland and South Africa primary and secondary schools are not distinguished, and the averages therefore are not comparable with other figures. In general, the cost of fee-paying schools has been taken as the gross cost, including fees and voluntary contributions, but in Ireland voluntary contributions and fees are not included. Again, in England loan charges and expenditure on administration are included, but are omitted in some European countries, while in the United States capital expenditure on the provision of schools is often charged to revenue. In spite of these defects, the diagram is perhaps suggestive.

Diagram II.—This diagram is based on official and unofficial (for private schools in some countries) data for 1930–1. For some countries exact particulars of age distribution are not available and the percentages of children attending school are therefore only approximate, though very near the truth. It is interesting to note that pre-school education is most developed in France and countries under French influence (Belgium, Holland, Italy, Switzerland). On the other hand, part-time continuation education is most developed in Germany and countries under German influence (Czechoslovakia, Holland, Sweden, Switzerland). Holland and Switzerland are the only countries which combine both features.

Diagram III.—The definition of private schools is not uniform. It has been comparatively easy to classify primary schools into public or private, but the task is much more difficult in the case of secondary schools. In the English-speaking and Latin countries all independent schools maintained by churches or private associations are classified as private and all schools subsidised either by central or local authorities as public. In Central European and Scandinavian countries such a classification would leave no private secondary schools at all, as almost all secondary schools started by the churches or by private individuals receive some subsidy from public authorities.

The group of secular or undenominational schools includes various types. In France and Spain, for instance, it means purely secular schools with no religious instruction whatever. In the English-speaking countries

these schools usually have an undenominational religious syllabus, which is subject to a conscience clause. Undenominational schools again should be divided into schools with " the right of entry " during or outside school hours (e.g. Australia) and without " the right of entry " (England). In Central Europe these schools are usually *Simultanschulen* with divided denominational instruction. Private schools are usually denominational, but there is a small number of undenominational schools as well. In those countries where the *Simultanschulen* are in practice denominational, they are classified as denominational (Poland, Greece, Bulgaria and Scandinavian countries).

We can notice several features from this diagram. First, private initiative is more active in the field of secondary education. Secondly, in Roman Catholic countries secondary education is to a large extent in the hands of religious orders or associations under the direct influence of the Church. Thirdly, in Protestant countries (with the exception of Scandinavia), the majority of private schools are Roman Catholic.

Diagram IV.—Vocational schools are excluded, which explains the predominance of girls in the secondary schools of Russia, the United States and Finland. The general feature is the decreasing percentage of girls in secondary schools and universities. The English-speaking and Scandinavian countries and Russia are the most advanced from the point of view of girls' education.

Diagram V.—This diagram is a dynamic representation of higher education in the period 1914–30. One general feature may be noticed. In all countries which participated in the Great War there is a sudden jump in the number of students in the years 1919-20. In many countries the year 1925 showed a marked decrease. This feature is not noticed in neutral countries (Switzerland excepted).

Diagram VI.—The definition of secondary schools was given in the YEAR BOOK for 1933. In France and Belgium only public secondary schools are included, as the data for private schools for the whole period are not available. In England, Scotland, Quebec and Cape Colony, preparatory schools are included, otherwise the data for different years would not be comparable. In Australia the junior technical schools are included for the same reason.

The sudden decrease in Russia for the year 1930 is explained by the transformation of secondary schools into vocational (see diagram for vocational schools). Similar reasons account for the decrease for the same year in Belgium, Czechoslovakia, Norway and Poland, where the development of vocational education deflected many boys from secondary schools.

Diagram VII.—The development of vocational education in many countries is mainly a post-war event, connected with new tendencies in educational legislation. For instance, in France the Act of 1919, in the United States the Act of 1917, in Sweden the Act of 1918, in Russia the Soviet legislation, resulted in sudden increases in vocational schools. Germany and Switzerland, with their old systems of part-time continuation schools, are the most advanced countries in vocational education.

N. H.

DIAGRAM I.—*Cost per Pupil in Public Schools (£ at par)*

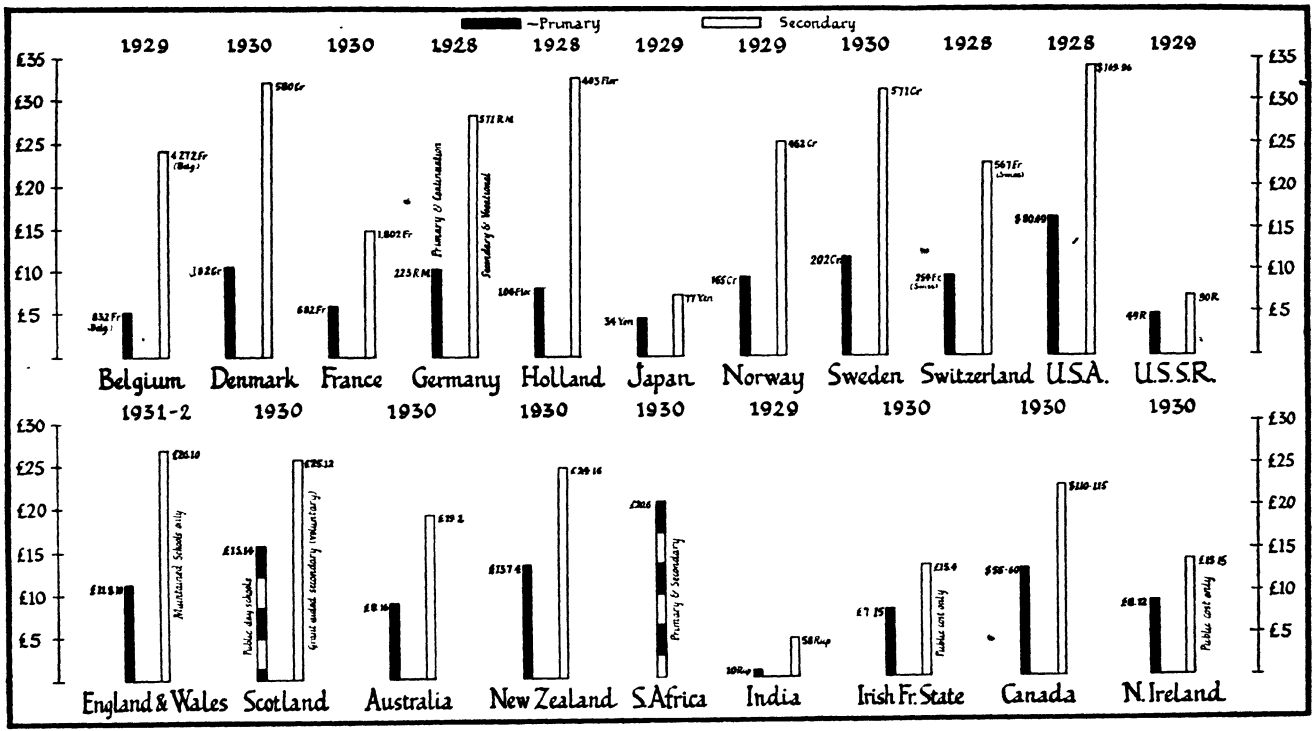


DIAGRAM II.—*Percentage of Children and Young People attending Schools*

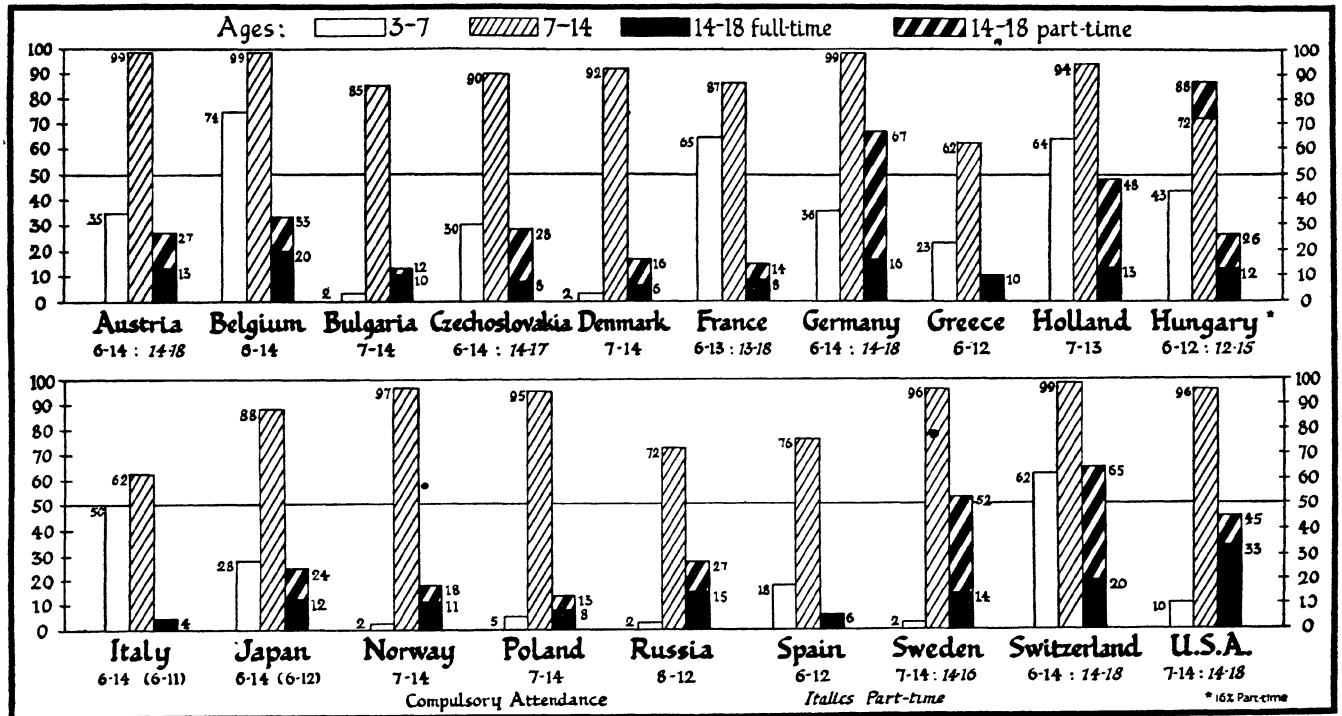


DIAGRAM II—(*continued*)

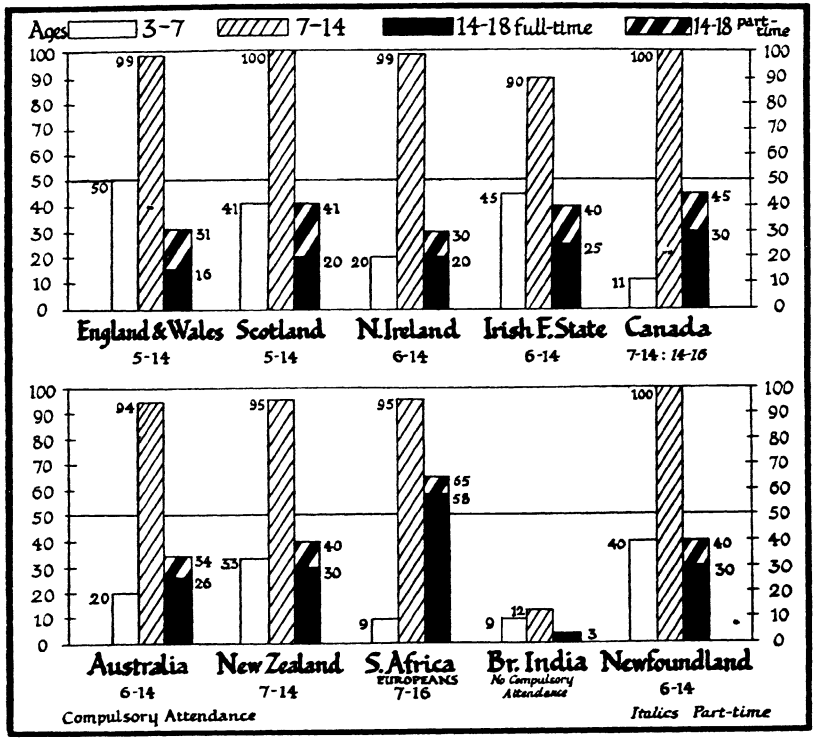


DIAGRAM III.—*Distribution of Scholars in Public and Private Schools*

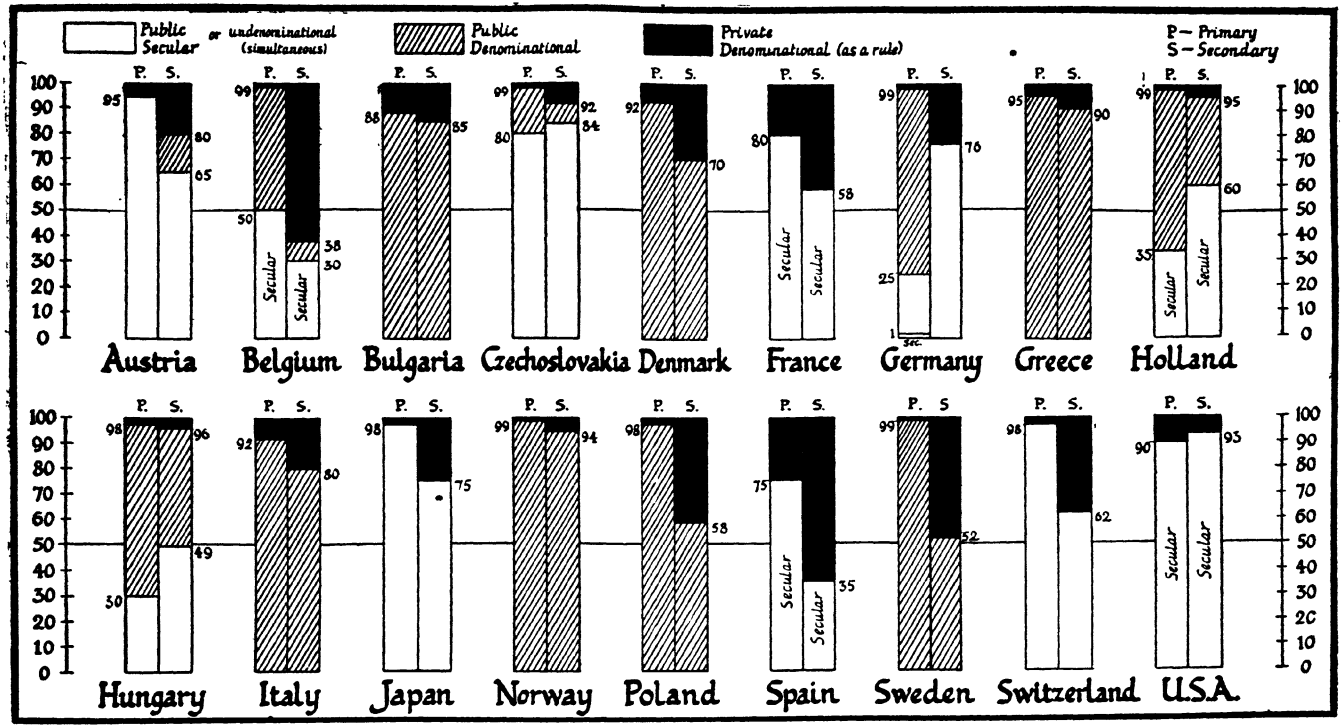


DIAGRAM III—(*continued*)

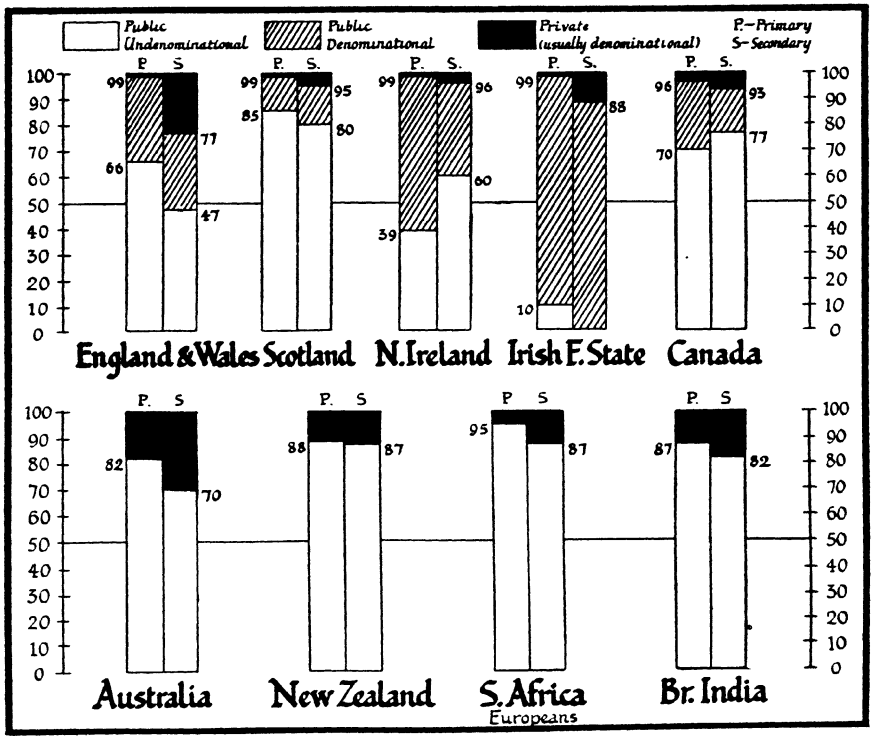


DIAGRAM IV.—*Percentage of Sexes in Schools*

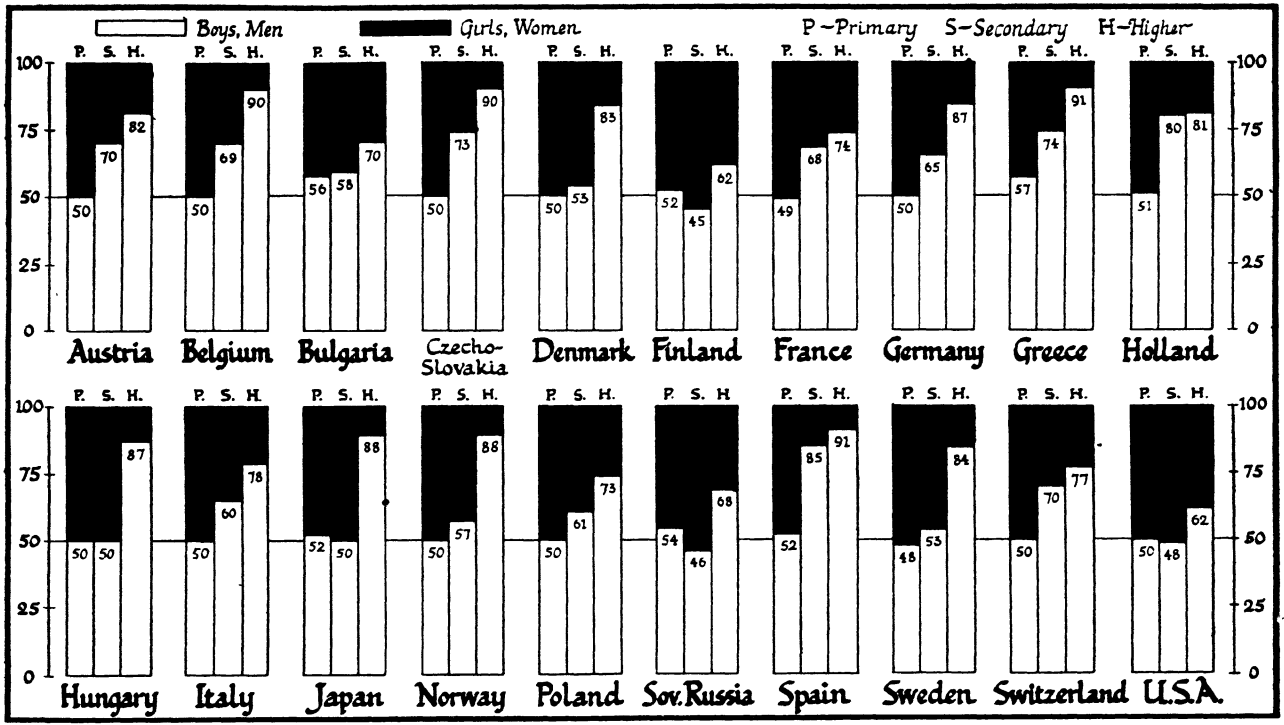


DIAGRAM IV—(*continued*)

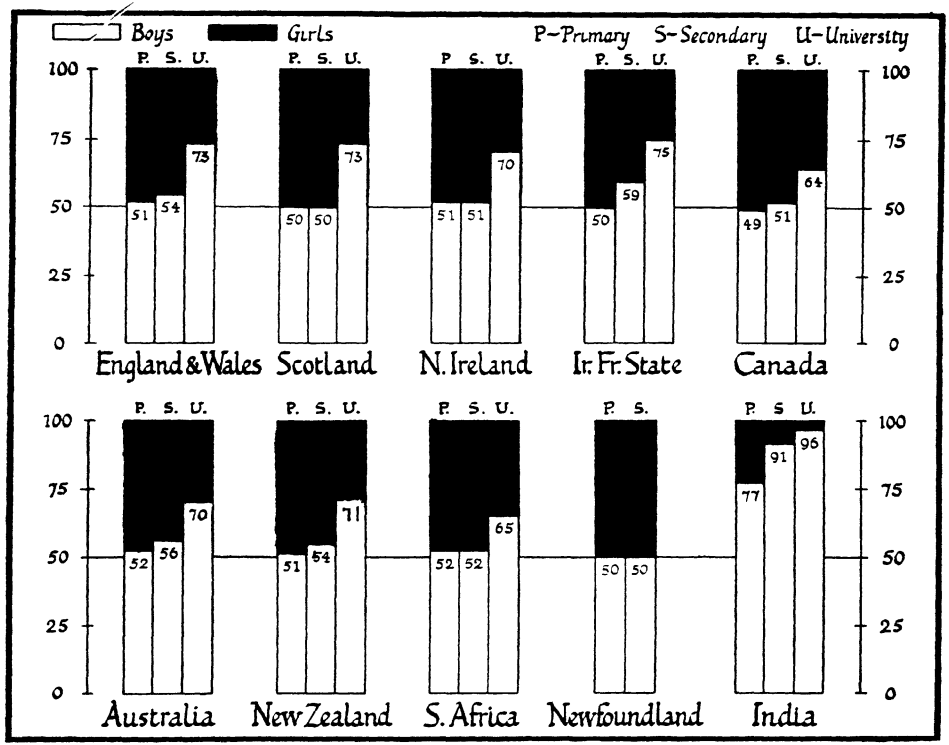


DIAGRAM V.—*Number of Students per* 10,000 *Inhabitants in* 1914–30 *in Universities and Higher Technical Schools*

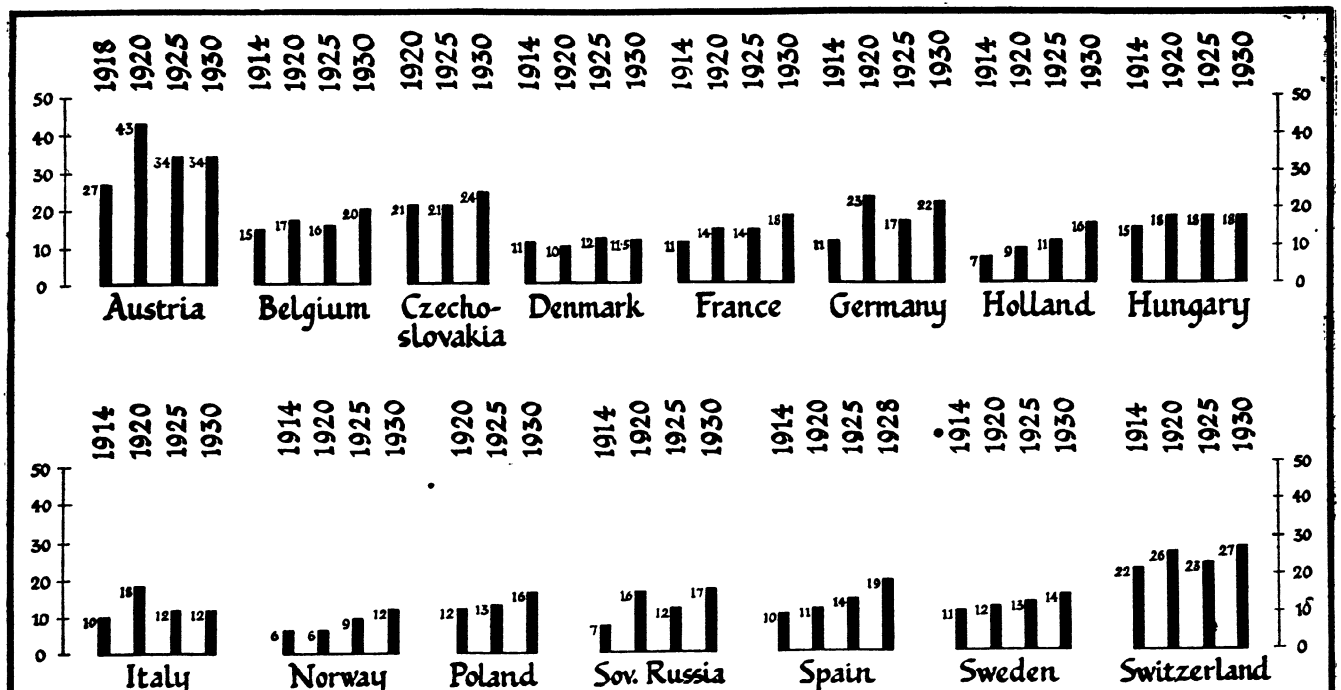
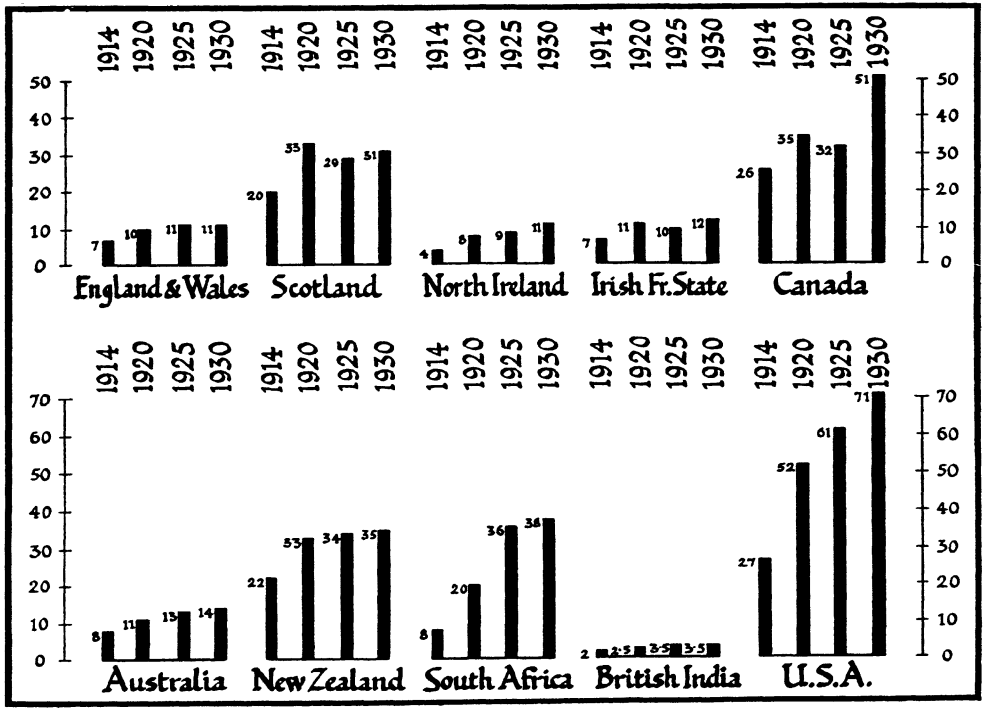


DIAGRAM V—(*continued*)



NOTE.—*Junior Colleges included in U.S.A. and Canada*

DIAGRAM VI.—*Number of Pupils in General Secondary Schools per* 10,000 *inhabitants in* 1914–30

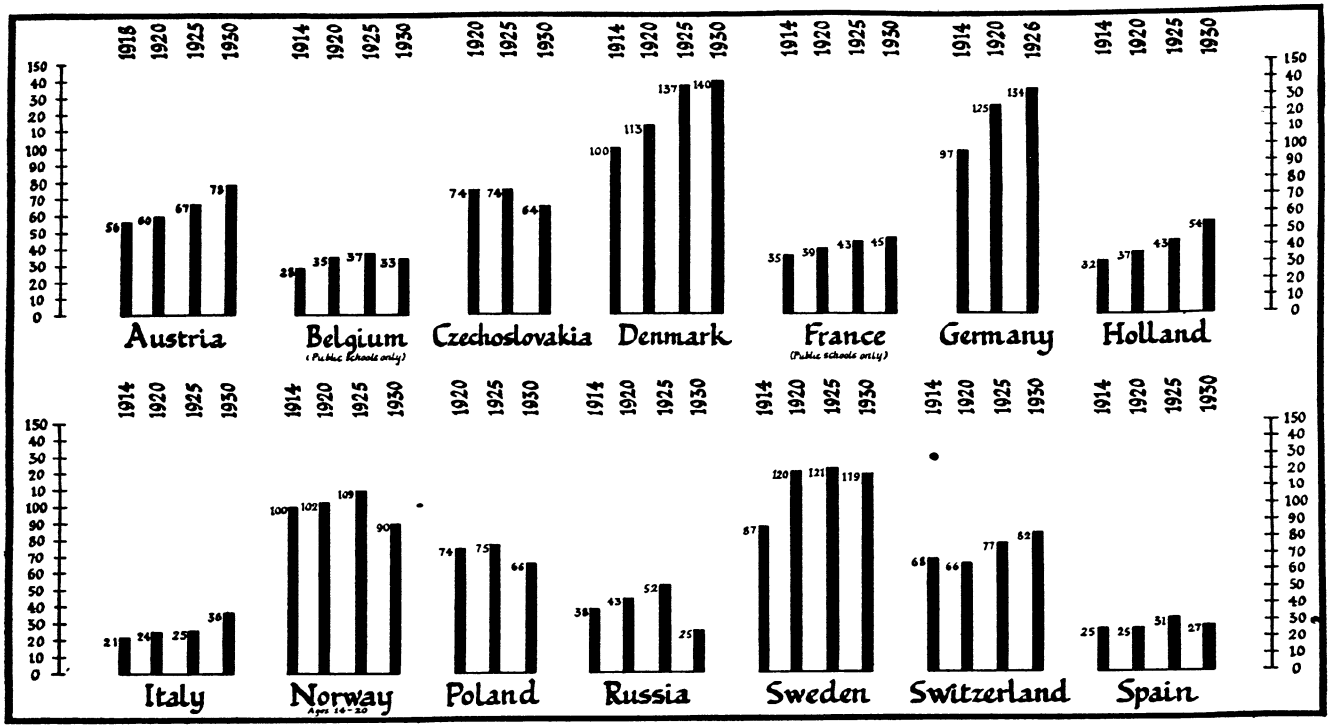


DIAGRAM VI—(*continued*)

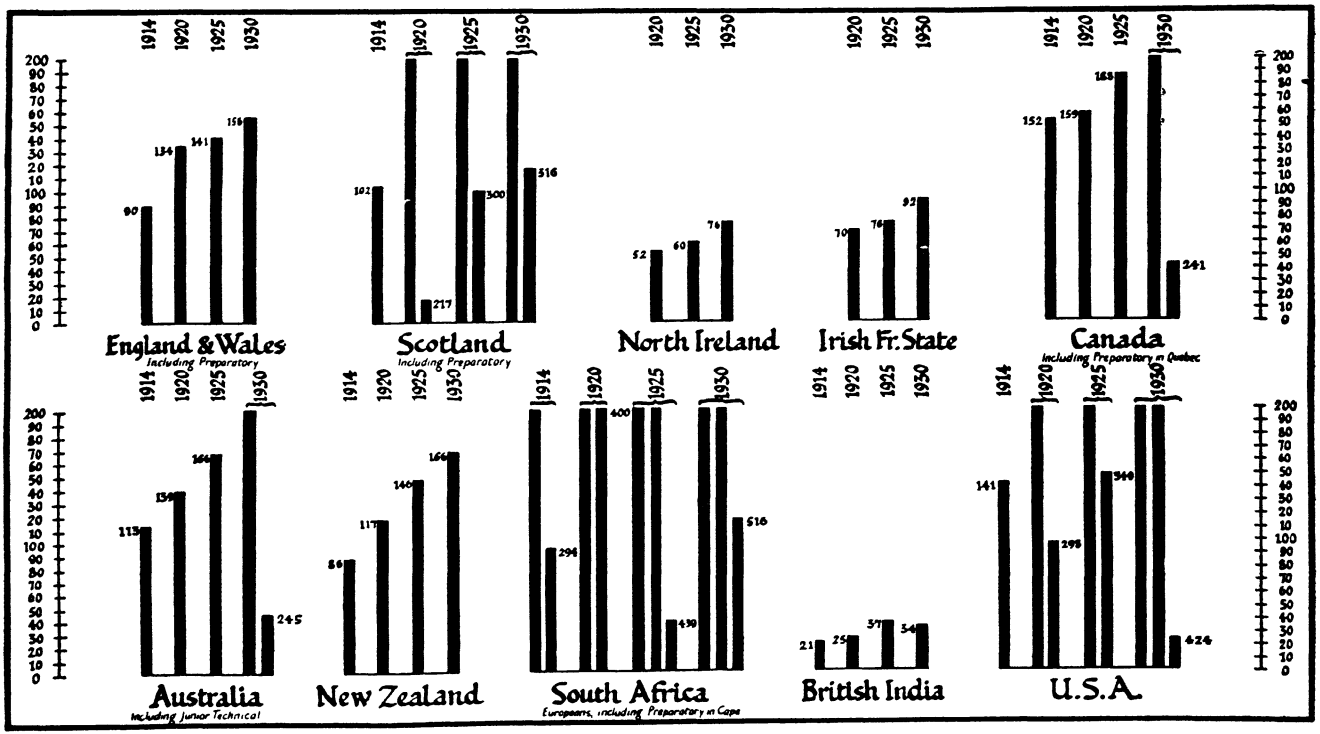


DIAGRAM VII.—*Number of Pupils in Vocational Schools per* 10,000 *Inhabitants in* 1914–30 (*including Part-time*)

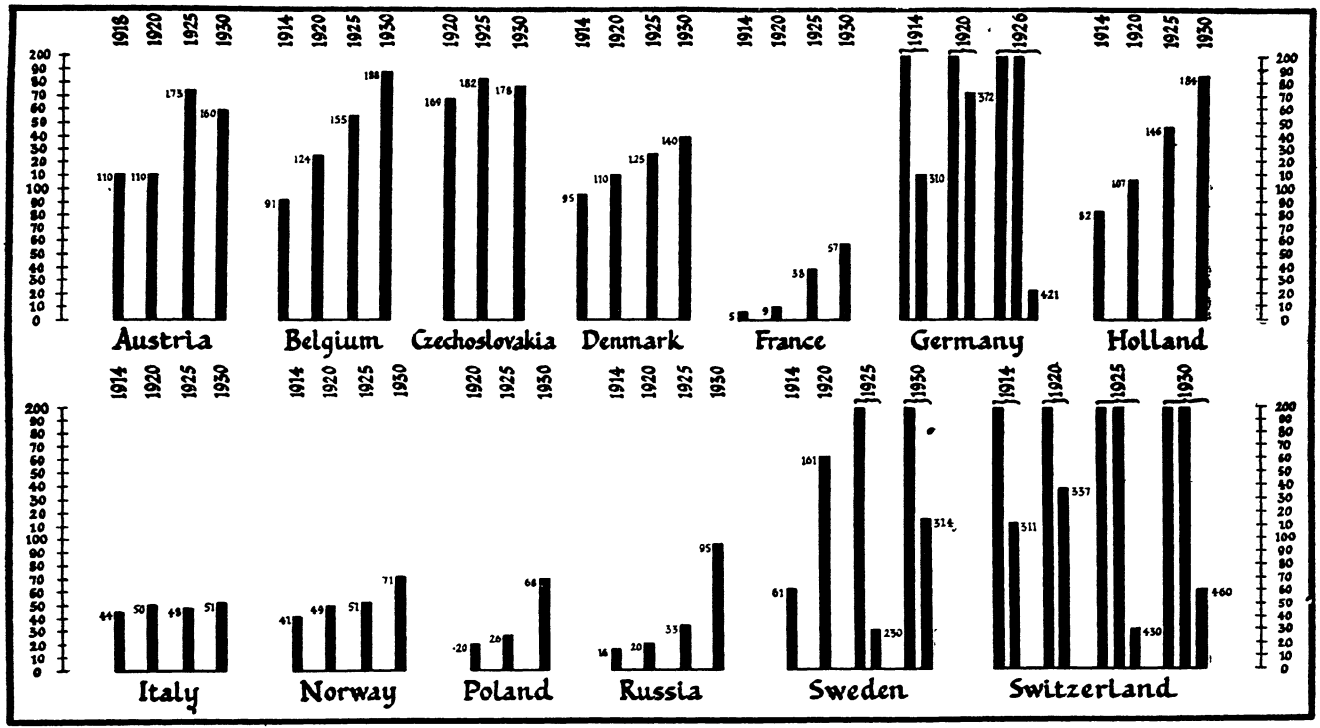
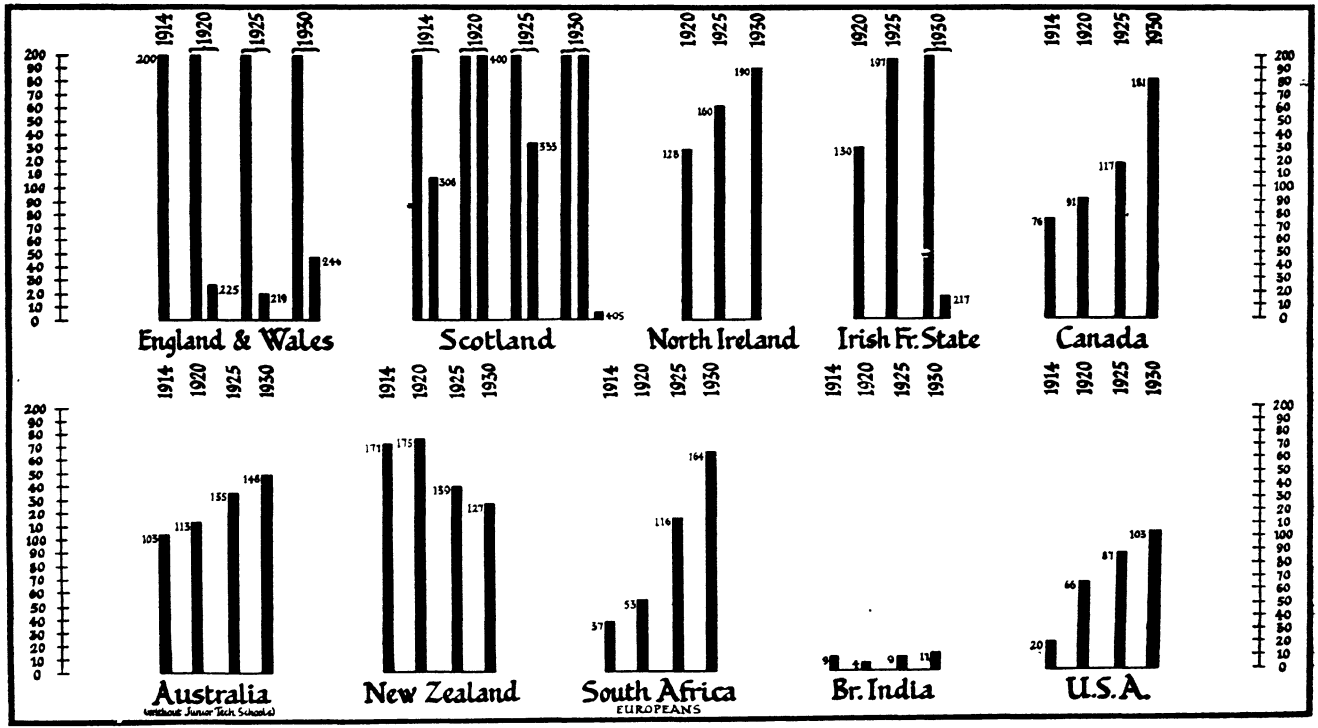


DIAGRAM VII—(*continued*)



SECTION IV

The Finance of Education in the United Kingdom

CHAPTER ONE

FINANCE: ENGLAND AND WALES

I. UNIVERSITIES: NOTES ON TABLE 1

THE statistics on pages 185 and 186 relate only to income and expenditure on revenue account.

1. **Parliamentary Grants.**—The total of £1,743,242 of Parliamentary grants is made up as follows:

	£
Treasury	1,502,620
Board of Education	13,950
Other Government Departments	226,672

The Treasury grants payable to each of the nineteen institutions are fixed from time to time, normally at intervals of five years, on the recommendation of the University Grants Committee, a standing committee of the Treasury. The twenty-six colleges and schools of the University of London and the four constituent colleges of the University of Wales (Aberystwyth, Bangor, Cardiff and Swansea) receive their grants through the central university authorities, with the exception of certain small non-recurrent grants. The grants from the Board of Education were made under the Board's Regulations for Further Education. Grants from other Government Departments are chiefly from the Ministry of Agriculture and Fisheries, but the Forestry Commission and the Empire Marketing Board also make grants to universities. The Oxford and Cambridge colleges do not receive any Treasury grants, and their income and expenditure are not included in these figures.

2. **Fees.**—The courses of study at the universities are so varied and the part-time students so numerous that there would be little value in any figure of average fee per student. The following examples of the scales of fees in force at two provincial universities (here styled A and B) will serve as illustrations:

	Tuition Fees			*'Fees for Examination and Graduation, etc.*		*Total Fees for Course*	
	Per Annum		*Total for Course*	*Total*			
	£	*s.*	£	£	*s.*	£	*s.*
Faculty of Arts (3-Years' Course):							
University A	25	0	75	20	10	95	10
University B	30	0	90	19	10	109	10
Faculty of Science (3-Years' Course):							
University A	32	0	96	20	10	116	10
University B	40	0	120	19	10	139	10
Faculty of Engineering (4-Years' Course):							
University A	45	0	180	25	0	205	0
University B	45	10	182	24	0	206	0

TABLE 1. (See Notes on pages 184, 187 and 188.)

SUMMARY OF UNIVERSITY INCOME AND EXPENDITURE FOR THE YEAR 1931–2
ENGLAND AND WALES

INCOME

INSTITUTION	TOTAL INCOME	ENDOWMENTS	PERCENTAGE	DONATIONS AND SUBSCRIPTIONS	PERCENTAGE	GRANTS FROM LOCAL AUTHORITIES	PERCENTAGE	PARLIAMENTARY GRANTS	PERCENTAGE	TUITION FEES	PERCENTAGE	EXAMINATIONS, GRADUATION, MATRICULATION, REGISTRATION FEES	PERCENTAGE	OTHER INCOME	PERCENTAGE
	£	£		£		£		£		£		£		£	
(1) University of London, its Colleges and Schools	1,640,556	144,317	8·8	51,904	3·2	128,135	7·8	589,830	35·9	460,475	28·1	135,020	8·2	130,875	8·0
(2) Birmingham University	207,219	30,470	14·7	2,248	1·1	29,893	14·4	76,218	36·8	49,868	24·1	10,457	5·0	8,065	3·9
(3) Bristol University	181,374	21,189	11·7	4,979	2·7	23,225	12·8	83,985	46·3	29,256	16·1	6,288	3·5	12,452	6·9
(4) Cambridge University (*a*)	615,084	140,079	22·8	5,984	1·0	654	·1	159,236	25·9	160,880	26·1	74,912	12·2	73,339	11·9
(5) Durham University	16,981	—	—	—	—	—	—	2,000	11·8	—	—	9,792	57·7	5,189	30·5
(6) Durham University, Armstrong College	120,254	11,675	9·7	3,721	3·1	14,333	11·9	57,242	47·6	29,477	24·5	1,673	1·4	2,133	1·8
(7) Durham University, Durham Colleges	48,404	9,107	18·8	—	—	12,677	26·2	10,150	21·0	12,197	25·2	1,491	3·1	2,782	5·7
(8) Durham University College of Medicine	36,749	2,034	5·5	218	·6	—	—	9,350	25·5	12,167	33·1	251	·7	12,729	34·6
(9) Exeter University College	52,545	2,365	4·5	810	1·6	15,464	29·4	14,500	27·6	16,391	31·2	1,481	2·8	1,534	2·9
(10) Leeds University	251,252	11,918	4·7	13,298	5·3	57,095	22·7	78,143	31·1	54,421	21·7	7,648	3·1	28,729	11·4
(11) Liverpool University	231,983	34,464	14·9	8,243	3·5	25,249	10·9	90,802	39·1	60,655	26·1	9,642	4·2	2,928	1·3
(12) Manchester University	262,310	50,931	19·4	4,661	1·8	20,100	7·7	85,107	32·4	68,198	26·0	12,071	4·6	21,242	8·1
(13) Manchester College of Technology	133,025	—	—	315	·2	92,904(*b*)	69·9	14,500	10·9	21,725	16·3	506	·4	3,075	2·3
(14) Nottingham University College	91,900	7,069	7·7	3,100	3·4	19,502	21·2	32,154	35·0	25,453	27·7	2,100	2·3	2,522	2·7
(15) Oxford University (*a*)	439,165	131,352	29·9	1,630	·4	35	—	130,406	29·7	45,088	10·3	77,823	17·7	52,831	12·0
(16) Reading University	113,242	13,931	12·3	387	·3	5,957	5·3	60,877	53·7	21,954	19·4	3,246	2·9	6,890	6·1
(17) Sheffield University	141,961	8,434	5·9	9,460	6·7	29,945	21·1	50,710	35·7	26,337	18·6	5,654	4·0	11,421	8·0
(18) Southampton University College	58,068	3,944	6·8	700	1·2	15,108	26·0	18,348	31·6	17,748	30·6	656	1·1	1,564	2·7
(19) University of Wales and its Constituent Colleges	366,701	24,805	6·8	4,883	1·3	64,505	17·6	179,684	49·0	67,563	18·4	13,926	3·8	11,335	3·1
Total	5,008,773	648,084	12·0	116,541	2·3	554,781	11·0	1,743,242	34·8	1,179,853	23·5	374,637	7·4	391,635	7·8

(*a*) The figures do not include the Accounts of the Colleges.

(*b*) Part of these sums is allowed by the Board of Education to rank in due course for grant from the Board.

TABLE 1—*continued.* (See Notes on pages 184, 187 and 188.)

EXPENDITURE

INSTITUTION	TOTAL EXPENDITURE	ADMINISTRATION	PER-CENTAGE	DEPARTMENTAL MAINTENANCE			PER-CENTAGE	MAINTENANCE OF PREMISES	PER-CENTAGE	OTHER EXPENDITURE		
				SALARIES OF TEACHING STAFF AND SUPERANNUATION	OTHER EXPENDITURE	TOTAL				FELLOWSHIPS, SCHOLARSHIPS, ETC.	TOTAL	PER-CENTAGE
	£	£		£	£	£		£		£	£	
(1) University of London, its Colleges and Schools	1,612,490	191,706	11·9	712,848	227,256	940,104	58·3	208,619	12·9	17,594	272,061	16·9
(2) Birmingham University	205,905	14,157	6·9	100,624	35,555	136,179	66·1	26,125	12·7	1,492	29,444	14·3
(3) Bristol University	179,815	14,037	7·8	83,550	26,754	110,304	61·3	24,722	13·8	794	30,752	17·1
(4) Cambridge University [1]	591,994	36,687	6·2	276,110	114,620	390,730	66·0	40,056	6·8	795	124,521	21·0
(5) Durham University	16,981	2,390	14·1	—	—	—	—	—	—	—	14,591	85·9
(6) Durham University, Armstrong College	119,240	7,950	6·7	72,833	18,635	91,468	76·7	9,786	8·2	1,424	10,036	8·4
(7) Durham University, Durham Colleges	43,673	3,995	9·1	22,083	5,327	27,410	62·8	2,644	6·1	1,142	9,624	22·0
(8) Durham University, College of Medicine	36,586	2,358	6·4	17,499	7,331	24,830	67·9	1,906	5·2	196	7,492	20·5
(9) Exeter University College	52,311	5,433	10·4	26,439	4,172	30,611	58·5	4,761	9·1	644	11,506	22·0
(10) Leeds University	249,726	15,603	6·3	134,181	40,734	174,915	70·0	26,064	10·4	737	33,144	13·3
(11) Liverpool University	228,812	15,190	6·6	127,985	36,522	164,507	71·9	27,160	11·9	1,139	21,955	9·6
(12) Manchester University	262,509	16,712	6·4	127,744	45,090	172,834	65·8	24,258	9·2	2,177	48,705	18·6
(13) Manchester College of Technology	133,025	8,778	6·6	59,660	15,181	74,841	56·3	30,723	23·1	5,504	18,683	14·0
(14) Nottingham University College	90,900	8,069	8·9	44,744	11,439	56,183	61·8	12,809	14·1	1,262	13,839	15·2
(15) Oxford University [1]	440,505	22,308	5·1	189,047	87,401	276,448	62·7	26,382	6·0	2,882	115,367	26·2
(16) Reading University	111,009	11,666	10·5	59,900	18,945	78,845	71·0	13,024	11·7	711	7,474	6·8
(17) Sheffield University	141,955	10,928	7·7	78,454	19,799	98,253	68·2	17,959	12·7	858	14,815	10·4
(18) Southampton University College	57,847	5,424	9·4	30,372	4,524	34,896	60·3	3,892	6·7	462	13,635	23·6
(19) University of Wales, and its Constituent Colleges	344,693	36,799	10·7	188,045	40,034	228,079	66·2	27,549	8·0	3,430	52,666	15·1
Total	4,919,976	430,190	8·0	2,352,118	759,319	3,111,437	63·2	528,439	17·4	43,243	849,910	17·2

[1] The figures do not include the accounts of the colleges.

Under this heading are included (in the case of all the nineteen institutions except Durham University, the Durham College of Medicine and the Manchester College of Technology) tuition grants from the Board of Education for teachers in training totalling £205,901. This total includes both the grants made to the Education Departments and also the payments specifically made in respect of students' fees.

The amounts and distribution of the tuition fees and fees for examinations, etc., reflect the differences in the constitutional systems of the universities. Practically the whole of formal teaching (lectures, etc.) is now undertaken by the university at Cambridge, while at Oxford a great part of it is still done by the colleges and consequently does not find its way into these accounts. In London the university obtains most of the fees for examination and graduation, while the colleges receive most of the tuition fees.

3. **Other Income.**—A considerable portion (£120,936) of this is derived from local authorities for services rendered (e.g. bacteriological examinations). It is not possible to isolate the expenditure incurred on these services.

Another large source of " other income " is the fees received by universities (especially Oxford, Cambridge and London) for conducting school examinations. The cost of these is on the other side of the account, but is not distinguished.

4. **" Other Expenditure."**—This heading, £849,910, contains as its two largest items capital expenditure met from revenue, £272,540, and examinations, £150,841, but there is a large unsorted item of £279,072 which contains *inter alia* the expenditure on school examinations. The remaining items of " other expenditure " are, in order of financial importance, fellowships and scholarships and prizes, grants to students' societies, rents, pensions met from general income interest, and grants to hostels, etc.

The expenditure shown for *fellowships, scholarships and prizes* amounts to £43,243, but this figure includes only expenditure from general revenues, omitting expenditure on scholarships, etc., out of endowments, donations or moneys provided by local authorities for such purposes. The total expenditure of universities on these objects approximates £140,000. To this sum should also be added the expenditure of the colleges at Oxford and Cambridge.

The scholarships, exhibitions, prizes and sizarships provided by these colleges are of the utmost importance, but it is almost impossible to give any approximately accurate estimate of their amount, for a variety of reasons. In the first place, many of them, including all the entrance scholarships and exhibitions, have a nominal or titular value (usually £100, £80 or £60 a year in the case of scholarships, and £40 a year in the case of exhibitions) which does not necessarily represent the amount actually paid to the holder. The amount paid is based on the particular holder's needs, subject to the titular maximum and, in the case of scholarships, to a minimum (usually £30 a year), representing the right to occupy rooms rent free. This regulation of the value of scholarships according to need was adopted as the result of the reports of the Royal Commissions on the two universities in 1922, and the value of the State scholarships, etc., awarded by any college may vary from year to year. They are provided partly out of the income of endowments appropriated either to particular scholarships or to scholarships generally, partly out of a fund fed from the general income of the college. At a very rough estimate, the entrance scholarships granted annually by Cambridge colleges might perhaps be put at about 160, of a total nominal value of about £14,000, and the number of entrance exhibitions and sizarships at about 100, of a total nominal value of about £3,500. The corresponding figures for Oxford might perhaps be put at 180 scholarships, nominal value £16,000, and 120 exhibitions, nominal value £4,000.

In the majority of cases, scholars and exhibitioners are elected before they come into residence, these scholarships and exhibitions being continued at the end of two years subject to progress and industry. Those already in residence who reach an equivalent standard are, however, elected to scholarships and exhibitions on the annual university or college examinations. To such scholarships and exhibitions must be added awards made to graduates

for research and other post-graduate work. It would probably be true to say that the total nominal annual value of all forms of assistance to students (including the figures already given for entrance scholarships, etc., and taking into consideration also the purely discretionary assistance given by the authorities of many colleges to poor students) is not less than £65,000 at Cambridge, and £60,000 at Oxford.

Adding these sums together, we reach a total of £265,000 as the approximate amount of university aid to students, and this figure is included in the total sum for aid to students appearing in the combined statement in Table 3, page 197.

II. NON-UNIVERSITY EDUCATION

The funds available for the support of non-university education in 1933–4, including certain expenditure from public funds in aid of students at universities, may be stated as follows. Except where otherwise stated in the Notes, the figures are those assumed for the Board's estimates for 1933–4.

TABLE 2

COMBINED INCOME

	£	£
Exchequer Grants :		
Net Vote of Board of Education	42,061,901	
" Allied Services " of Board	430,847	
Agricultural Education	298,237	
		42,790,985
Rates :		
Elementary Education	31,298,500	
Higher Education	8,328,500	
Agricultural Education	121,802	
		39,748,802
Total from Public Funds		82,539,787
Income other than from Public Funds :		
Pension Contributions		
Teachers	2,428,000	
Employers (£ 2,428,000)		
Less from Local Authorities' Contributions (£ 2,245,000)	183,000[1]	
		2,611,000
Other Receipts of Board		25,000
Receipts by Local Authorities—Elementary :		
Endowment Income		19,355
Receipts by Local Authorities—Higher :		
Fees in Local Authority Schools	2,072,371	
Endowment Income	51,902	
Fees, etc. (Agricultural Education)	45,000	
		2,169,273
Carried forward		87,364,415

[1] The £183,000 here included is the only part of the Employers' Contributions that does not fall upon Public Funds.

Brought forward			87,364,415
Receipts by Non-Local Authority Schools:			
Fees in aided Secondary Schools		2,255,628	
Endowment Income		290,476	
Other Receipts		156,304	
			2,702,408
Fees, Endowment Income and Other Receipts in Non-Local Authority Training Colleges and Technical Schools			amount not known
			£90,066,823

COMBINED EXPENDITURE

	£	£	£
Administration and Inspection:			
(1) By Board, Board's Vote	629,135		
Allied Services	279,347		
		908,482	
(2) By Local Authorities:			
Elementary Education	2,575,000		
Higher Education	775,000		
		3,350,000	
			4,258,482
Pensions to Teachers:			
Board's Vote		6,541,000	
Allied Services		151,500	
			6,692,500
Loan Charges—(Local Authorities):			
Higher		1,760,000	
Elementary		3,270,000	
			5,030,000
Aid to Students:			
By Board		223,425	
By Local Authorities—Higher Education		2,410,000	
			2,633,425
Board's Museums and Royal College of Art			192,096
Elementary Education (not including Administration and Inspection nor Employers' Contributions to Teachers' Pensions, nor Loan Charges):			
(1) *Non-Local Authority Schools* (This is the amount of grants received from Board. Their other expenditure is not known.)		66,100	
(2) *Local Authorities*	£		
Salaries of Teachers	38,710,000		
Maintenance Allowances	70,000		
Extra Expenditure on Reorganisation, etc.	925,000		
School Medical and other Special Services	4,430,000		
Other Expenditure	9,400,000		
		53,535,000	
Add Expenditure equal to Endowments		19,355	
			53,554,355
Carried forward			72,360,858

	£	£
Brought forward		72,360,858
Higher Education (not including Administration and Inspection, nor Employers' Contributions to Teachers' Pensions, nor Aid to Students, nor Loan Charges):		
(1) *Training of Teachers:*		
Local Authorities' Expenditure Net . .	270,000	
Add Expenditure equal to Fees, etc. . .	160,407	
Board's Grants to Non-Local Authority Institutions	733,170	
		1,163,577
(2) *Secondary Schools:*		
Local Authorities' Expenditure Net . .	6,510,000	
Add Expenditure equal to Fees, etc., in Local Authorities' Schools	1,486,277	
Board's Grants to aided schools . . .	549,250	
Add Expenditure equal to Fees, etc. . .	2,602,408	
		11,147,935
(3) *Technical, etc., Schools:*		
Local Authorities' Expenditure Net . .	4,000,000	
Add Expenditure equal to Fees, etc., in Local Authorities' Schools	425,687	
Board's Grants to Non-Local Authority Institutions	123,025	
		4,548,712
(4) *Agricultural Education*		422,468
(5) *Other Expenditure—Higher Education:*		
Local Authorities' " Other Expenditure " .	270,000	
Add Expenditure equal to Endowment Receipts	51,902	
Board's Grants in Respect of Employers' Contributions (Higher Education) to Non-Local Authority Bodies	37,000	
Central Welsh Board (an Amount equal to its Grant)	6,400	
		365,302
Total . .		£90,008,852

NOTES ON TABLE 2

1. Discrepancy between Income and Expenditure

The discrepancy between the two sides of this account is due to the fact that whereas the expenditure of local authorities to fall on rates has been estimated *for* the year, the Board's grants entered on the income side are those payable *in* the year.

There is also an error of understatement on both sides of the tables, since the income of the non-local authority training colleges and the non-local authority technical schools from sources other than grants and rates has been omitted from lack of information.

2. Net Vote of Board of Education

(a) The total of £42,061,091 may be analysed as follows :

	£	£
Board's Administration and Inspection		629,135
Elementary Education :		
Grants to Local Education Authorities	29,884,000	
Grants to Other Bodies (Voluntary Schools for Defective Children, £40,100; Elementary Schools in boarding institutions, £11,600; Play Centres and Nursery Schools, £14,400	66,100	
		29,950,100
Higher Education :		
Grants to Local Education Authorities	7,958,000	
Grants to Other Bodies (Training Colleges, £733,170; Secondary Schools, £549,250; Technical Schools, £123,025; Grants on Employers' Pension Contributions, £37,000; Central Welsh Board, £6,400)	1,448,845	
		9,406,845
Aid to Students (State Scholarships for University students, £103,675; Teachers at Advanced Courses, £1,500; Training-college Students, £98,160; Science Scholars (Imperial College), £12,750; Scholarships Royal College of Art, £5,840)		223,425
Royal College of Art		14,746
Board's Museums		177,340
Pensions to Teachers		6,541,300
		46,942,901
Less—		
Appropriations in Aid :		
Pension Contributions	4,856,000	
Other Receipts	25,000	
		4,881,000
		42,061,091

(b) Board's Grants to Local Education Authorities

For higher education these grants are wholly based on recognised expenditure, and are at the rate of 50 per cent. of such expenditure.

For elementary education different objects of expenditure attract grants at different rates, viz. teachers' salaries, the school medical service, other special services, and maintenance allowances at 50 per cent.; loan charges, administration and other expenditure at 20 per cent. The resultant grant is increased by a capitation grant of 45*s.* per unit of average attendance and reduced by a sum equivalent to the yield of a 7*d.* rate in the area concerned. Additional grants are also paid to necessitous areas—£400,000 having been provided for this purpose in each of the last two years. In 1933–4 the twenty-nine authorities which qualified for such grants in 1929–30 will receive the same amounts as in that year, and a further grant will be payable to those authorities which qualify under a new formula which takes into account average attendance, the product of a rate and population.

(c) Board's Grants to Other Bodies

These are commonly capitation grants, e.g. £7 7*s.* per pupil in a secondary school, or £25 for a non-resident student, and £43 for a resident student in a training college. The grants to technical colleges are of annual amounts originally calculated on certain factors, then stereotyped into block grants subject to variation as circumstances change.

3. Allied Services

The entries on the expenditure side of the account show that this heading consists as to £279,347 of administrative expenses (upkeep of office buildings, postage, stationery, and pensions of former officers of the Department), and as to £151,500 of certain pensions to teachers under a system now disused, and chargeable to the Consolidated Fund.

4. Agricultural Education

These are grants made by the Ministry of Agriculture and Fisheries in 1931–2, most of which (£255,666) were paid to local authorities. The expenditure of these authorities out of the rates (£121,802), added to their receipts (£45,000) from other sources in the same year, make up the total expenditure on agricultural education shown on the expenditure side of the account (£422,648). The figures for 1931–2 have been adopted, as these are the latest figures in which the grants made by the Ministry of Agriculture and Fisheries to universities (which have already been included in the income of universities in Part I) can be distinguished from their grants to local authorities and other bodies.

5. Pensions to Teachers

This service is centrally managed and is financed with the help of contributions at the rate of 10 per cent. of the salaries of teachers, of which 5 per cent. is payable by the teachers and 5 per cent. by their employers.

The Board pays grant on the contributions of local authorities as employers at the same rate as on teachers' salaries.

The contributions are not invested, but are received by the Board and applied in aid of the Board's whole current expenditure of the year, so reducing the net sum voted by Parliament; but a statutory account has to be kept, showing how the fund would stand if it had been invested at compound interest and charged with the benefits properly chargeable to it.

The benefits take the form of retiring allowances and lump sums based on the average salary received during the last five years of service.

It has been actuarially calculated that the benefits will ultimately amount to about £10,000,000 annually if the numbers of teachers and the scales of salary remain the same as at the time when the calculation was made. The incidence of the cost of the benefits at present payable (£6,541,300) is estimated to be: teachers, £2,428,000; employers, £1,214,000 (after deducting grant from the Board at 50 per cent.); Board, £2,899,300.

6. Local Authorities' Expenditure on Elementary Education

(*a*) *General*

The items of elementary expenditure total £59,380,000, to which should be added £1,925,000 for employers' contributions towards pensions (gross contributions before deducting the Board's grant). The full total is therefore £61,305,000, or 248/8 per child. These are net figures, after deducting receipts from endowments and also £181,269 received from parents of children in schools for blind, deaf or defective children (£60,401), or of children receiving meals at school (£53,638), or undergoing medical treatment (£67,230). The Board of Education estimate that this expenditure of £61,305,000 is met as to £30,006,500 out of the Board's grants, and as to £31,298,500 out of rates. The slight difference between these figures and those given in Note 2 (*a*) above is that the figure here is that of grants *for* the year and the figure in Note 2 (*a*) is that of grant payments *in* the year.

(*b*) *Salaries of Teachers*

The sum of £38,710,000 for this heading consists as to £38,215,000 of payments to adult full-time teachers in regular employment and as to

£495,000 of payments to other ratings. The principal of these amounts is calculated to provide for 170,400 teachers at an average salary of £224 5s. These teachers fall into four main classes, whose numbers are shown in the table on page 48.

Teachers' salary scales rest on collective agreements made between bodies representative of their employers and themselves, and approved by the Board of Education. The present scales are due to remain in force until March 31st, 1934, but in accordance with the National Economy (Education) Order, 1931, they are subject to a deduction of 10 per cent. as from October 1st, 1931. There are four different scales, of which the highest obtains in Greater London and the lowest in the more purely agricultural counties. That known as Scale III contains the greatest number of teachers and approximates most closely to the average. To set the four scales out in detail would occupy considerable space; but stripped of technicalities and complications they may be said to offer the following prospects to a man or a woman, assumed to gain his or her certificate after two years' training and begin teaching at age 21.

The salary of such a teacher will be:

	Scales I and II		*Scale III*		*Scale IV*	
	Men	*Women*	*Men*	*Women*	*Men*	*Women*
	£	£	£	£	£	£
In the first year, age 21	168	150	180	162	192	180
In the fifth year, age 26	216	186	228	198	240	216
In the tenth year, age 31	276	231	288	243	300	261

If the teacher is not promoted to be a head teacher, the salary will reach its maximum for assistant teachers:

For men in the thirteenth, fifteenth, seventeenth and nineteenth years under Scales I, II, III, and IV respectively, the maximum salary in each case being £312, £330, £366, and £408.

For women in the twelfth, thirteenth, fifteenth and seventeenth years respectively, the maximum salary in each case being £246, £258, £288, and £324.

The salaries of head teachers begin at sums ranging according to size of school from £18 to £120 (for a man) or £13 10s. to £90 (for a woman) above the salary attained as assistant before promotion, and rise to maxima ranging under Scale III from £381 to £546 for a man and £303 to £438 for a woman. The maxima under Scales I, II, and IV range for men from £327 to £468 under Scale I, £345 to £492 under Scale II, £423 to £606 under Scale IV, and for women from £261 to £372 under Scale I, £273 to £396 under Scale II, £339 to £486 under Scale IV.

The age at which a teacher may be promoted to a headship varies from one area to another, and differs for men and women.

Uncertificated teachers (i.e. teachers who are not college trained, but have some examination qualification recognised by the Board) have lower rates of salary. Under Scales I and II these rates range from £102 for men and £93 for women in the first year to a maximum of £198 for men in the fourteenth year, and £156 for women in the twelfth year. Under Scale III the corresponding figures are £108, £99, £222 (seventeenth year), and £174 (fourteenth year); and under Scale IV £117, £108, £246 (nineteenth year), and £198 (sixteenth year). Uncertificated teachers are not now normally appointed to head-teacherships, but a number still retain such teacherships.

Supplementary teachers, i.e. teachers without qualifications, appointed to serve in particular schools, have no settled scales of pay and no pension rights.

Sir George May's Economy Committee, reporting in July 1931, gave the following figures for the average salaries of elementary-school teachers on March 31st, 1930:

Certificated Men	*Certificated Women*	*All Certificated*	*All Uncertificated*	*All Supplementary*	*Total Men*	*Total Women*	*All Teachers*
£	£	£	£	£	£	£	£
334	254	279	143	98	324	217	245

(*c*) *Maintenance Allowances*

Under the law as it stands at present the local authorities have power to pay maintenance allowances in respect of children attending public elementary schools from the age of 12. Expenditure on maintenance allowances which the Board recognise for purposes of grant must be in accordance with arrangements approved by them and must be for pupils of at least 14 years of age at the beginning of the term in which they receive allowances. The pupils must continue their education for a definite period of suitable length at an organised and progressive course of instruction, and must be in need of assistance for that purpose.

(*d*) *Extra Expenditure on Reorganisation*

The authorities are incurring special expenditure on the provision of suitable school accommodation under their reorganisation schemes. The capital expenditure to which the authorities became contractually committed between September 1st, 1929, and September 4th, 1931, will rank for grant at 50 per cent. instead of 20 per cent.

(*e*) *Medical and Other Special Services*

These include the school medical service, special schools for defective children, provision of meals, etc.

(*f*) "*Other Expenditure*"

This includes rent, rates, taxes, insurance, fuel, light, cleaning, caretakers' wages, books, apparatus, stationery, repairs to buildings and furniture, and capital outlay when charged to revenue.

7. Local Authorities' Expenditure on Higher Education

(*a*) *General*

The items of higher expenditure total £15,995,000 (excluding agricultural education), to which should be added £320,000 for employers' contributions towards pensions—(gross contributions before deducting the Board's grant). The full total is therefore £16,315,000. These are net figures after deducting all receipts from sources other than the Board's grants. The chief of these receipts are fees, which were as follows in 1929–30:

	£
Training Colleges	160,407
Secondary Schools	1,486,277
Technical, etc.	425,687
Total . .	2,072,371

In the same year the authorities received £51,902 from endowments of schools now maintained by them.

Expenditure on Training of Teachers, Secondary Schools and Technical Institutions consists in part of expenditure by local authorities in maintaining

their own schools, and in part of grants to other bodies to aid them in maintaining theirs. In the year 1930–1 the grants to other bodies amounted to about £2,838,081, of which £2,181,184 was for secondary schools, 634,037 for technical, etc., and a small amount, £22,860, for training colleges.

(*b*) *Local Authority Schools*

The following is a summary of the expenditure incurred by the local authorities in maintaining their own schools in 1930–1 :

	Training Colleges	*Secondary Schools*	*Technical, etc., Schools*	*Total*
	£	£	£	£
Salaries of Teachers . .	163,873	4,448,034	2,757,749	7,369,656
Employers' Contributions for Teachers' Pensions .	6,565	217,592	62,717	286,874
Books and Stationery .	10,445	228,771	121,178	360,394
Furniture, Apparatus, etc. .	17,341	128,249	171,882	317,472
Upkeep of Buildings . .	26,571	242,775	120,121	389,467
Fuel, Light and Cleaning .	44,191	387,165	383,073	814,429
Rates and Taxes . .	24,345	227,654	128,541	380,540
Boarding Expenses . .	90,351	27,190	19,248	136,789
Other Expenses. . .	88,380	308,591	350,000	746,971
Total . .	472,062	6,216,021	4,114,509	10,802,592

(*c*) *Non-Local Authority Schools*

The following is a summary of the income and expenditure of the aided secondary schools in 1930–1 :

INCOME

	£
Grants from Central or Local Authorities .	2,920,442
Fees	2,255,628
Endowment Income.	290,476
Other Receipts	156,304
Total .	5,622,850

EXPENDITURE

Salaries of Teachers	3,881,316
Books and Stationery	250,331
Furniture, Apparatus, etc. . . .	66,836
Rent	44,753
Upkeep of Buildings, etc.	223,808
Fuel, Light and Cleaning	332,124
Rates and Taxes	183,868
Clerical Assistance	85,015
Other Expenses	452,326
Total .	5,520,377

(*d*) *Salaries*

Under both (*b*) and (*c*) above salaries account for more than 70 per cent. of the expenditure, exclusive of loan charges and administration. If a similar exclusion is made in elementary education, the same remark holds good.

The Economy Committee gave the following figures for the average salaries of secondary-school teachers on March 31st, 1930.

Graduates			*Non-graduates*		
Men	*Women*	*Men and Women*	*Men*	*Women*	*Men and Women*
£	£	£	£	£	£
436	348	397	330	256	278

(e) *Aid to Students*

The aid to students granted by local authorities in 1931–2, when such aid amounted to a total of £2,416,744, was given partly (£1,213,140) in the form of payment of fees, and partly (£1,203,604) in the form of maintenance allowances. Of the total, approximately £1,662,000 went to pupils in secondary schools, £287,000 to university students, £257,000 to pupils in technical schools and £210,000 to students in training colleges.

The average annual value of the maintenance allowances at the universities is about £49, and elsewhere between £8 and £9.

8. Capital Expenditure

The capital expenditure of local education authorities is met chiefly from loans, but in part also from revenue account. Their capital expenditure for the year 1930–1 was :

Elementary Education	£5,405,885
Higher Education	£2,872,501
Total . . .	£8,278,386

This includes £490,987 charged to revenue account. The outstanding loans were, at March 31st, 1932 :

Elementary Education	£50,838,818
Higher Education	£20,011,545
Total . . .	£70,850,363

The loan charges which appear in the revenue account, and which amount for 1933–4 to £5,030,000, contain provision for the interest on all loans outstanding, and also for the repayment of the principal over a term of years. As all the capital expenditure of local education authorities finds its way ultimately, if not immediately, into the revenue account, it would be incorrect to add this capital expenditure to the revenue expenditure shown above.

III. COMBINED STATEMENT FOR UNIVERSITY AND SCHOOL EDUCATION

In amalgamating the statement of income and expenditure of universities in Table 1 with that of all non-university education in Table 2, it is necessary to throw out the grants from the Board of Education to the universities, which are shown both in Table 1 as university income and in Table 2 as part of the Vote of the Board; and to make a corresponding deduction from the combined expenditure. There is no other overlap between the two statements.

It is necessary also to bring in the cost of administration of the university grants (say £15,000).

On this basis the whole of the income and expenditure reviewed in this chapter may be summarised as below. It should, however, be observed that this table must not be regarded as representing income and expenditure in a particular year, since the university figures are actuals for the year 1931–2, while the non-university figures are mainly those of the estimates for 1933–4, and include certain actuals for agricultural education for 1931–2. The result of combining these figures is not, however, seriously misleading.

TABLE 3

INCOME

	£	£
Exchequer Grants :		
University (including £15,000 for Allied Services)	1,758,242	
Non-university	42,790,985	
	44,549,227	
Deduct Board of Education Grants to Universities for Further Education	13,950	
		44,535,277
Rates :		
University	554,781	
Non-university	39,748,802	
		40,303,583
Endowments :		
University	648,084	
Non-university	361,733	
		1,009,817
Fees :		
University	1,554,490	
Non-university	4,372,999	
	5,927,489	
Deduct Board of Education Tuition Fee Grants to Universities	205,901	
		5,721,588
Donations and Subscriptions—University		116,541
Other Income :		
University	391,635	
Non-university	2,792,304	
		3,183,939
		94,870,745
Add sum equal to estimated University Expenditure on aid to Students in excess of that shown in University Returns		221,757
		95,092,592

EXPENDITURE

	£	£
Administration :		
Government Departments	923,482	
Universities	430,190	
Local Education Authorities	3,350,000	
		4,703,672
Other Expenditure of Universities (excluding aid to students)		4,226,692
Board's Museums and Royal College of Art		192,096
School Teachers' Pensions		6,692,500
Carried forward		£15,814,960

	Brought forward	£15,814,960
Loan Charges (L.E.A.s.)		5,030,000
Aid to Students		2,898,425
Elementary Schools	Exclusive of	53,554,355
Training of Teachers	Administration	1,163,577
Secondary Schools	and Loan	11,147,935
Technical, etc., Schools	Charges	4,548,712
Agricultural Education		422,468
Miscellaneous		365,302
		£94,945,734

[The expenditure on non-university education in Table 2 is £57,971 less than the income, for reasons explained in Part II, Note 1. The expenditure of universities in Table 1 is £88,797 less than the income. The combined expenditure is accordingly £146,768 less than the combined income.]

E. P.

CHAPTER TWO

Survey of Education Expenditure in England and Wales during Eleven Years

Total Expenditure

The Year Book for 1933 contained a detailed survey of expenditure in England and Wales between 1923 and 1933. Space forbids the reproduction of this survey *in extenso* this year, but we can bring its main outlines up to date. The table on page 200 shows the growth of educational expenditure during the past eleven years, with an analysis of the burden falling on the central government and the local authorities respectively (page 201). This table does not cover all the expenditure borne on the estimates of the Board of Education. It excludes expenditure on museums and on miscellaneous items. It also excludes the Board's direct expenditure on Aid to Students. This last item is, however, referred to below. As the figures of the Board's grants to local education authorities are figures of the grants due to local authorities *for* the year, only 90 per cent. of which are payable in the year, the figures cannot be exactly reconciled with the returns of the Board's actual expenditure in any given year. Figures of grants for the year, however, are the only basis on which to estimate the trend of educational expenditure.

Central Expenditure

The conclusions to be drawn from these figures can be briefly summarised. Central expenditure has increased by £1,464,000 (line 13 of the table), but of this total £1,147,000 is accounted for by the increase in the Board's net expenditure on Teachers' Pensions (line 8) under the contributory superannuation scheme. To this £1,147,000 should be added the Board's grants to local authorities in respect of their contributions to this superannuation scheme, i.e. about 50 per cent. of the sum of lines 4 and 5 for 1933–4, i.e., say, £1,120,000. It must be remembered that these contributions from local authorities represent a burden transferred from the central government to the local authorities in 1928–9. Apart, therefore, from teachers' pensions, central expenditure is £803,000 less than eleven years ago.

This decrease in central expenditure is made up as follows:

	£	£
Increase in the Board's grants to local authorities	967,000	
Less Board's grants in respect of pension contributions	1,120,000	
Net reduction in Board's grants to local authorities for purposes other than pensions		153,000
Reduction in the Board's grants to non-local authority institutions (mainly a transfer from taxes to rates, owing to these institutions electing to receive grant from the local authorities instead of from the Board)		513,000
Reduction in the Board's administrative expenditure		137,000
Total reduction in central expenditure		£803,000

Against this reduction, however, must be set an increase in the Board's expenditure on aid to students in the eleven years from £152,582 to £223,425, an increase of £70,843, which is more than accounted for by an increase of expenditure on State scholarships at universities from £24,639 to £103,675.

TABLE 4

EXPENDITURE ON EDUCATION WITHIN THE PURVIEW OF THE BOARD OF EDUCATION

(£000's)

	—	1923–4	1924–5	1925–6	1926–7	1927–8	1928–9	1929–30	1930–1	1931–2	1932–3[3]	1933–4[3]
	L.E.A.'s Expenditure:											
1	Elementary	54,152	54,851	55,602	56,051[4]	55,875	56,694	58,210	59,732	58,430	57,585	56,805
2	Higher	10,261	10,750	11,321	11,512	12,504	13,550	14,321	15,358	15,286	15,520	15,220
3	Administration	3,183	3,342	3,487	3,465	3,474	3,449	3,555	3,609	3,507	3,650	3,350
	Contributions to Teachers' Pensions:											
4	Elementary Teachers	—	—	—	—	—	2,032[2]	2,068[2]	2,109[2]	2,029[2]	1,925[2]	1,925
5	Higher Teachers	—	—	—	—	—	276[2]	271[2]	290[2]	288[2]	320[2]	320
	Board's Grants to Non-L.E.A. Institutions:											
6	Elementary	83	68	72	71	68	68	74	74	75	70	66
7	Higher	1,944	1,973	1,914	1,979	1,629	1,347	1,400	1,567	1,573	1,535	1,448
8	Board's Net Expenditure on Teachers' Pensions	538	980	1,303	1,354	1,733	— 516	— 218	93	836	1,241	1,685
9	Board's Expenditure on Administration and Inspection	766	791	807	767	740	703	694	676	647	647	629
	Total Expenditure	70,927	72,755	74,506	75,199	76,023	77,603	80,375	83,508	82,671	82,493	81,448
	ANALYSIS: CENTRAL AND LOCAL EXPENDITURE											
	Exchequer Grants to L.E.A.s[1]:											
10	Elementary	31,717	31,739	32,035	32,154[4]	31,984	33,340[2]	33,482	35,316	33,089[2]	30,633[2]	30,006
11	Higher	5,280	5,552	5,831	5,629	6,295	7,083[2]	7,468	8,037	8,223[2]	8,151[2]	7,958
12	Board's Other Expenditure above	3,331	3,812	4,096	4,171	4,170	1,620	1,957	2,426	3,144	3,493	3,828
13	Total Central Expenditure	40,328	41,103	41,962	41,954	42,449	42,023	42,907	45,779	44,456	42,277	41,792
14	Expenditure from Rates	30,599	31,652	32,544	33,245	33,574	35,580	37,468	37,729	38,215	40,216	39,656

[1] *Grants for the year including grants in respect of local expenditure on administration.*

[2] *From 1928–9 the Board's grants include grant on local authorities' contributions towards teachers' pensions, which may be roughly estimated at about 50 per cent. of the contributions.*

[3] *Estimates figures.*

[4] *The figures for this year are higher than they would normally have been owing to expenditure on feeding children during the coal strike. This abnormal expenditure amounted to about £600,000, rather more than half of which was provided out of central grants.*

TABLE 5

EXPENDITURE OF LOCAL EDUCATION AUTHORITIES: ELEMENTARY EDUCATION

(£000's)

The figures in italics represent cost per unit of average attendance

—	1923–4	1924–5	1925–6	1926–7	1927–8	1928–9	1929–30	1930–1	1931–2	ASSUMED FOR BOARD'S ESTIMATES 1932–3	1933–4
Teachers' Salaries	41,019 *163s. 3d.*	41,100 *166s. 7d.*	41,180 *166s. 4d.*	41,051 *165s. 3d.*	41,128 *165s. 2d.*	41,393 *168s. 8d.*	41,826 *169s. 4d.*	42,387 *171s. 11d.*	40,706 *162s. 8d.*	38,925 *156s. 11d.*	38,710 *157s. 0d.*
Loan Charges on Schools	2,934 *11s. 8d.*	2,870 *11s. 8d.*	2,848 *11s. 6d.*	2,772 *11s. 2d.*	2,892 *11s. 7d.*	3,063 *12s. 6d.*	3,219 *13s. 0d.*	3,270 *13s. 3d.*	3,189 *12s. 9d.*	3,400 *13s. 9d.*	3,270 *13s. 3d.*
Administration	2,578 *10s. 3d.*	2,678 *10s. 10d.*	2,773 *11s. 2d.*	2,735 *11s. 0d.*	2,739 *11s. 0d.*	2,746 *11s. 2d.*	2,843 *11s. 6d.*	2,868 *11s. 9d.*	2,722 *10s. 10d.*	2,890 *11s. 8d.*	2,575 *10s. 5d.*
Other Expenditure	7,503 *29s. 10d.*	8,085 *32s. 10d.*	8,555 *34s. 7d.*	8,478 *34s. 2d.*	8,542 *34s. 3d.*	8,744 *35s. 7d.*	9,416 *37s. 11d.*	9,546 *38s. 9d.*	9,548 *37s. 9d.*	9,850 *39s. 9d.*	9,400 *38s. 2d.*
Special Services[1] (including loan charges)	2,696 *10s. 9d.*	2,796 *11s. 4d.*	3,019 *12s. 3d.*	3,750 *15s. 1d.*	3,313 *13s. 4d.*	3,494 *14s. 3d.*	3,749 *15s. 2d.*	4,023 *16s. 4d.*	4,300 *17s. 2d.*	4,390 *17s. 8d.*	4,430 *18s. 0d.*
Maintenance Allowances	— —	— —	— —	— —	— —	— —	— *0s. 2d.*	67 *0s. 3d.*	76 *0s. 4d.*	80 *0s. 4d.*	70 *0s. 3d.*
Special Reorganisation Expenditure, 1929–31	— —	— —	— —	— —	— —	— —	— —	439 *1s. 9d.*	701 *2s. 10d.*	940 *3s. 9d.*	925 *3s. 9d.*
Employers' Pension Contributions	— —	— —	— —	— —	— —	2,032 *8s. 3d.*	2,068 *8s. 5d.*	2,109 *8s. 6d.*	2,029 *8s. 1d.*	1,925 *7s. 9d.*	1,925 *7s. 10d.*
Total	56,730 *225s. 9d.*	57,529 *233s. 3d.*	58,375 *235s. 10d.*	58,786 *236s. 8d.*	58,614 *235s. 4d.*	61,472 *250s. 5d.*	63,121 *255s. 6d.*	64,709 *262s. 6d.*	63,181 *252s. 5d.*	62,400 *251s. 7d.*	61,305 *248s. 8d.*
[1] Divided as follows:											
Provision of meals	152	138	169	798	183	227	284	343	406	350	350
Other Services —	2,544	2,658	2,850	2,952	3,310	3,267	3,465	3,680	3,894	4,040	4,080

TABLE 6

EXPENDITURE OF LOCAL EDUCATION AUTHORITIES: HIGHER EDUCATION

(£000's)

—	1923–4	1924–5	1925–6	1926–7	1927–8	1928–9	1929–30	1930–1	1931–2	ASSUMED FOR BOARD'S ESTIMATES 1932–3	1933–4
Training of Teachers	324	330	325	317	309	288	282	307	274	300	270
Secondary Schools [1]	4,496	4,743	4,980	5,029	5,568	6,176	6,471	6,842	6,698	6,550	6,510
Technical Schools	2,938	3,143	3,368	3,334	3,610	3,733	3,967	4,313	4,126	4,050	4,000
Loan Charges	720	718	751	832	956	1,110	1,250	1,383	1,551	1,770	1,760
Administration	605	664	714	726	735	703	712	741	785	760	775
Aid to Students	1,589	1,621	1,695	1,769	1,870	1,982	2,000	2,283	2,417	2,490	2,410
Other Expenditure	194	195	202	231	191	261	252	230	220	360	270
Employers' Pension Contributions	—	—	—	—	—	276	271	290	288	320	320
Total	10,866	11,414	12,035	12,238	13,239	14,529	15,205	16,389	16,359	16,600	16,315
[1] Cost per pupil in Maintained Secondary Schools (omitting loan charges, aid to students, administration):									(PROVISIONAL)		
Gross Expenditure:	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.		
Salaries	20.16	20.17	20.17	20.14	20.16	20.13	20.13	20.7	18.19	—	—
Other	5.11	6.6	6.6	6.12	6.14	6.14	6.7	6.17	6.12	—	—
Employers' Pension Contributions	—	—	—	—	—	1.0	1.0	1.0	19	—	—
Total Gross Expenditure	26.7	27.3	27.3	27.6	27.10	28.7	28.10	28.4	26.10	—	—
Receipts	7.1	7.4	7.2	7.16	7.5	7.4	7.3	7.1	6.15	—	—
Net Expenditure	19.6	19.19	20.1	19.10	20.5	21.3	21.7	21.3	19.15	—	—

Local Expenditure

Meanwhile, expenditure from rates has increased by £9,057,000 or, excluding pension contributions, by £7,932,000. This increase of £7,932,000 is accounted for as follows :

	£
Increase in local expenditure . . .	7,779,000
Reduction in Board's grants as above .	153,000
Total added burden on the rates . .	£7,932,000

Tables 5 and 6 (pages 201 and 202) analyse the local expenditure year by year on elementary and secondary education respectively, including administration. A comparison between these tables will show that the total increase of £7,779,000 in local expenditure, excluding pension contributions, is made up of an increase of £2,650,000 on elementary and an increase of £5,129,000 on higher education, including administration in both cases.

It will be observed that, owing to the 1931 salary cuts, expenditure on elementary teachers' salaries has fallen by £2,309,000, and on elementary administration by £3,000, so that the increase in expenditure on elementary education under other heads amounts to no less than £4,962,000. This figure is made up as follows :

	Increase. £
Loan Charges.	336,000
Special Services, excluding the Provision of Meals (i.e. Special Schools and Medical Services)	1,536,000
Maintenance Allowances	70,000
Reorganisation expenditure incurred in the years 1929–31 .	925,000
Provision of Meals	198,000
Other Expenditure	1,897,000
Total	£4,962,000

The growth of expenditure on higher education, excluding employers' expenditure on pensions contributions, i.e. £5,129,000, is mainly accounted for by the growth in expenditure on what may be called the standard type of English secondary school. Under this heading must be classed not only the increase of £2,014,000 on secondary schools, but also most of the increase of £821,000 on Aid to Students, and the greater part of the £1,040,000 increase in loan charges.

E. P.

CHAPTER THREE

FINANCE: SCOTLAND

I. UNIVERSITIES: NOTES ON TABLE 7

(i) Income

PARLIAMENTARY Grants (£369,648).—The only receipts from Government Departments other than the University Grants Committee were grants of £757 to Aberdeen University from the Forestry Commission, £5,471 to Edinburgh University from the Department of Agriculture for Scotland and the Empire Marketing Board, and £24,446 to the Royal Technical College, Glasgow, from the Education (Scotland) Fund.

The following examples illustrate typical fees in a Scottish university:

	M.A.	*B.Sc. (Pure Science)*	*B.Sc. (Engineering)*
Length of Course .	3 years	4 years	3 years
Tuition Fees (per annum) . .	15 guineas	25 guineas	30 guineas
Other Fees for Course (Matriculation, Examination, Graduation, etc.) . .	£16 15*s.*	£20 19*s.*	£18 6*s.* 6*d.*
Total Fees for Course	£64	£125 19*s.*	£112 16*s.* 6*d.*

A considerable part of the fee income is indirectly derived from (*a*) the bursary assistance granted to students by local education authorities, and (*b*) the grants made in aid of students' fees by the Carnegie Trust for the Universities of Scotland.

(ii) Capital Expenditure

The expenditure of £867,450 relates only to income and expenditure on revenue account. In addition, considerable sums received from private donors have been applied to meet capital expenditure. During the five years ended July 31st, 1929, the capital expenditure of the Scottish Universities on buildings, sites and properties amounted to upwards of £612,000.

II. EXPENDITURE OF THE SCOTTISH EDUCATION DEPARTMENT

The Votes of Parliament for Public Education, Scotland, and for Reformatory and Industrial Schools, Scotland, are administered by the Scottish Education Department, under whose minutes, codes and regulations, grants are made in respect of the services aided from the Education (Scotland) Fund. The expenses of the Department's staff in Edinburgh and London (£58,386 [1]), of Inspection (£58,398 [1]) and of the Royal Scottish Museum (£22,616 [1]) are borne directly on the vote for public education. The

[1] Estimates for the year 1933–4.

TABLE 7

SUMMARY OF UNIVERSITY INCOME AND EXPENDITURE FOR THE YEAR 1931–2. SCOTLAND

(See Notes on following pages)

INCOME

INSTITUTION	TOTAL INCOME	ENDOWMENTS	PERCENTAGE	DONATIONS AND SUBSCRIPTIONS	PERCENTAGE	PARLIAMENTARY GRANTS	PERCENTAGE	TUITION FEES	PERCENTAGE	EXAMINATIONS, GRADUATION, MATRICULATION, REGISTRATION FEES	PERCENTAGE	OTHER INCOME	PERCENTAGE
	£	£		£		£		£		£		£	
Aberdeen University . .	120,062	21,531	17·9	1,000	·8	62,805	52·3	21,239	17·7	8,476	7·1	5,011	4·2
Edinburgh University . .	285,707	50,268	17·6	8,648	3·0	112,064	39·2	76,882	26·9	30,654	10·8	7,191	2·5
Glasgow University . .	276,757	47,734	17·3	7,766	2·8	97,083	35·1	86,414	31·2	37,181	13·4	579	·2
Glasgow Royal Tech. College .	71,869	9,617	13·4	5,148	7·2	40,696	56·6	15,625	21·7	57	·1	726	1·0
St. Andrews University, including Dundee Univ. College	111,610	24,040	21·5	2,104	1·9	57,000	51·1	18,827	16·9	6,830	6·1	2,809	2·5
Total . . .	866,005	153,190	17·7	24,666	2·8	369,648	42·7	218,987	25·3	83,198	9·6	16,316	1·9

EXPENDITURE

	TOTAL EXPENDITURE	ADMINISTRATION	PERCENTAGE	DEPARTMENTAL MAINTENANCE		TOTAL	PERCENTAGE	MAINTENANCE OF PREMISES	PERCENTAGE	OTHER EXPENDITURE		PERCENTAGE
				SALARIES OF TEACHING STAFF AND SUPERANNUATION	OTHER EXPENDITURE					FELLOWSHIPS, SCHOLARSHIPS, PRIZES, ETC.	TOTAL	
	£	£		£	£	£		£		£	£	
Aberdeen University . .	123,746	7,110	5·7	73,130	15,045	88,175	71·3	16,793	13·6	277	11,668	9·4
Edinburgh University . .	284,680	18,779	6·6	163,814	40,061	203,875	71·6	31,412	11·0	—	30,614	10·8
Glasgow University . .	274,969	19,993	7·3	156,814	32,946	189,760	69·0	30,064	10·9	428	35,152	12·8
Glasgow Royal Tech. College	71,943	5,660	7·9	45,437	7,671	53,108	73·8	10,722	14·9	418	2,453	3·4
St. Andrews University, including Dundee Univ. College	112,112	9,596	8·6	64,903	16,496	81,399	72·6	11,095	9·9	603	10,022	8·9
Total . . .	867,450	61,138	7·0	504,098	112,219	616,317	71·1	100,086	11·5	1,726	89,909	10·4

TABLE 8

RECEIPTS AND PAYMENTS FROM THE EDUCATION (SCOTLAND) FUND FOR THE YEAR ENDING MARCH 31ST, 1932

(See Notes on following pages)

RECEIPTS	£
I. Grants (Votes of Parliament):	
(*a*) General Aid Grant (including £586,842 voted in lieu of payments formerly made from the Local Taxation (Scotland) Account)	7,016,000
(*b*) Superannuation of Teachers	777,312
II. Other Receipts:	
(*a*) Contributions towards expenses of Teachers' Superannuation:	
(i) From Teachers	410,181
(ii) From Managers	407,797
(*b*) Interest on Scottish Teachers' Superannuation Fund (Act of 1908)	65,744
Total Receipts	£8,677,034

PAYMENTS	£
Balance overdrawn in 1930–1	250
I. Act of 1908, Section 16(1) (*a*) to (*f*):	
(*a*) Expenses of Leaving Certificate Examination, etc.	8,515
(*b*) Universities	—
(*c*) Central Institutions (Grants)	119,576
(*d*) Training of Teachers (Grants)	43,211
(*e*) Teachers' Pensions, etc.	931,967
(*f*) Other educational expenditure (Grants)	22,207
II. Act of 1918, Section 21(2) (*a*):	
(*a*) Voluntary Schools (Grants)	105,279
(*b*) Grants in aid of Employers' Superannuation Contributions (Schools not under Education Authorities)	10,890
(*c*) Grants to Education Authorities:	
(i) Balances due for 1930–1[1] and earlier years (net) £502,811	
(ii) Payment to account for 1931–2 6,197,800	6,700,611
III. Payment to Exchequer in respect of Superannuation Contributions from:	
(i) Teachers	353,426
(ii) Managers	352,500
Balance on March 31st, 1932	28,602
Total Payments	£8,677,034

[1] *The financial year of the authorities normally ends on May 15th in each year.*

Department is responsible for conducting the annual Leaving Certificate Examinations, but the special expenses in connection with this service, amounting to nearly £8,000 a year, are chargeable to the Education (Scotland) Fund. This sum does not, however, represent the whole cost of the examination, as a considerable part of the work falls upon the Department's inspectorate and office staff whose salaries are chargeable to the parliamentary Vote.

III. EDUCATION (SCOTLAND) FUND. NOTES ON TABLE 8

(a) History of the Fund

The Fund was established under the Education (Scotland) Act, 1908, which provided that various grants from the Local Taxation (Scotland) Account, together with a part of the general aid grant voted by Parliament, should be paid annually into one fund from which grants could be made in aid of those services which called for administration either on a national basis (e.g. teachers' superannuation), or on a wider basis than that afforded by the areas of most of the parish or burgh school boards (e.g. secondary education). When the county was adopted as the administrative area for educational purposes under the Act of 1918, the scope of the Fund was extended to provide for one central pool from which local authorities and voluntary school managers would receive their grants.

(b) Income

The income of the Fund now falls under two main heads, viz. the General Aid Grant voted annually by Parliament, and other receipts relating to the finance of teachers' superannuation. The General Aid Grant is the principal source of grants in aid of education in Scotland, and consists of:

(i) A fixed sum in lieu of the moneys formerly payable from the Local Taxation (Scotland) Account (£586,842);

(ii) A sum equal to the amount expended from the parliamentary Vote for education in Scotland in the " standard year " 1913–14 (£2,306,835); and

(iii) A sum which varies in proportion to education grants voted for England and Wales, viz. *eleven-eightieths* of the excess of the amount estimated to be expended from the Vote for England and Wales over the amount so expended in the " standard year " 1913–14 (for 1933–4, £3,432,737).

The " *eleven-eightieths,*" *or* " *Goschen* " *formula* as it is popularly called, has its origin in the arrangement adopted in 1888 by the then Chancellor of the Exchequer for the distribution of one-half of the proceeds of the Probate Duty, which was made available as grants in aid of local expenditure. The total sum was distributed to England and Wales, Scotland and Ireland, in the proportions of 80, 11 and 9, on the principle that each partner in the United Kingdom should receive a share roughly proportionate to its contribution to the Imperial Exchequer. This fraction of eleven-eightieths came to be regarded as a reasonable measure of the comparative claims of Scotland and England and Wales respectively, and the principle was embodied in section 21(1) of the Education (Scotland) Act, 1918, for the purpose of determining the variable portion of the General Aid Grant. The total sum available for education grants is thus determined on broad principles, and without conditions which might interfere with the application of the money to the educational needs and circumstances of Scotland.

After providing for grants in aid of the expenses of the Leaving Certificate Examination, Central Institutions, Training and Superannuation of Teachers, Voluntary Schools, etc., the balance of the Fund is available for grants to the education authorities.

(c) Expenditure on Central Institutions

Eleven such institutions (technical, art, domestic science, nautical colleges, etc.) are under the administration of the Scottish Education

Department, and provide advanced instruction for upwards of 7,600 day students and 10,700 evening students. In addition three agricultural colleges and two veterinary colleges are scheduled as Central Institutions, but fall within the administrative province of the Department of Agriculture for Scotland.

In the year 1931–2 the cost of maintaining the 11 institutions under the Scottish Education Department amounted to £261,116, and was met as follows :

	£	£	*Per cent. of total*
Grants :			
Education (Scotland) Fund .	99,857		
Other grants for maintenance purposes	17,057		
		116,914	44·8
Fees (and other returns for expenditure incurred)		110,546	42·3
Endowments and other local sources (including contributions of education authorities)		33,656	12·9
Total .		261,116	100

Apart from certain fixed sums payable in lieu of contributions made by Town and County Councils in the year 1908–9, and thereafter discontinued, the grants from the Education (Scotland) Fund are determined in relation to the approved expenditure of the Institutions (Central Institutions (Scotland) Grant Regulations, 1923). The " other grants " consist mainly of payments by the University Grants Committee to the Royal Technical College, Glasgow, and to the Heriot-Watt College, Edinburgh. A payment of £175 from the Department of Scientific and Industrial Research is also included. In 1931–2, the income available was sufficient to meet expenditure without payment of maintenance grants from the Education (Scotland) Fund in the case of two institutions.

The capital expenditure of Central Institutions is also aided from the Education (Scotland) Fund. In the year under review, grants of £5,576 were made in aid of capital works.

The three agricultural colleges (Aberdeen, Edinburgh and Glasgow) were maintained in 1931–2 at a cost of £110,033, which was met by :

	£	*Per cent. of total*
Grants from the Vote for Agriculture, Scotland	55,200	50
Grants from Education (Scotland) Fund	12,045	11
Fees (and other Returns for Expenditure Incurred)	25,033	23
Contributions of Local Authorities, etc.	12,528	11
Other Income	5,227	5
Total . .	110,033	100

The main source of state-aid is the grant made by the Department of Agriculture for Scotland after consideration of the approved expenditure of the colleges. The grants payable from the Education (Scotland) Fund are in the nature of a supplementary contribution from local sources. They

represent the payments in lieu of contributions of Town and County Councils which were discontinued after 1908–9, and which are now supplemented by further payments under Grant Regulations of the Scottish Education Department. In the case of the one veterinary college aided by Government grants, expenditure of £13,703 was met as to 30 per cent. from grants, 55 per cent. from fees and other returns for expenditure incurred, and 15 per cent. from endowments and other sources of local income.

(d) Expenditure on Training of Teachers

The administrative machinery by means of which the training centres and colleges are brought within the control of a single National Committee for the Training of Teachers is referred to on page 63. Any deficit in the funds of the Committee which may remain after crediting grants, fees, etc., is met by an annual levy on all education authorities, each authority contributing according to the number of qualified teachers in its service (Section 9(3) of the Act of 1918).

In the year ended July 31st, 1932, the expenditure of the Committee amounted to £222,243 (including £46,793 for capital purposes) and was met from :

	£	£
(1) Grants (Education (Scotland) Fund) in aid of :		
(*a*) Maintenance expenses . .	39,428	
(*b*) Capital expenditure . . .	28,103	
(*c*) Employers' contributions to teachers' superannuation . .	2,007	
		69,538
(2) Fees (including hostel fees)		46,839
(3) Contributions by Education Authorities (including contributions in respect of education of children in Demonstration Schools), etc. . . .		105,866
Total .		222,243

The number of students in full-time training throughout the year under review was 2,221, the average net cost per student, after deducting income from fees, being £45 11*s.* 0*d.* (based on maintenance cost of training centres and colleges).

(e) Superannuation of Teachers

The arrangements for the superannuation of teachers in Scotland are governed by the Education (Scotland) (Superannuation) Acts.

While the arrangements for contributions and benefits are under the present scheme similar to those made in England and Wales, there are considerable differences as regards central finance. In England and Wales the Exchequer receives the contributions of teachers and employers and assumes responsibility for the payment of benefits. In Scotland the Education (Scotland) Fund receives the contributions of teachers and employers and assumes responsibility for the payment of benefits. The Exchequer limits its obligations to the payment into the Education (Scotland) Fund of eleven-eightieths of the pensions payments made in England and Wales. At the same time, the Education (Scotland) Fund does not pay over to the Exchequer the contributions of teachers and managers collected in Scotland, but a sum equal to eleven-eightieths of the contributions collected in England and Wales. Owing to the comparatively larger number of qualified teachers in Scotland, the contributions of the Scottish teachers and employers considerably exceed eleven-eightieths of the contributions of their English colleagues. This surplus becomes available to meet the correspondingly higher pension obligations in Scotland.

The financial position with regard to teachers' superannuation in Scotland for the year 1931–2 may be summarised as follows :

	£	£
Expenditure on Pensions (including refund of teachers' contributions)		931,967
Met from :		
(1) Exchequer payments based on eleven-eightieths arrangement	980,361	
Deduct equivalent of teachers' and employers' contributions in England and Wales paid to Exchequer from Education (Scotland) Fund	705,926	
Net payment from Exchequer		274,435
(2) Teachers' contributions		410,181
(3) Interest on residue of Superannuation Fund established in 1911 and special receipt		65,744
(4) Net contributions from Education Authorities and other school managers (i.e. from rates or funds of voluntary managers)		181,607
		£931,967

(f) Expenditure on Voluntary Schools

The only schools directly aided from the Education (Scotland) Fund which remain under voluntary management are thirteen secondary schools with 9,554 scholars, seven residential schools for blind, deaf or defective children with 510 scholars and three orphanages with 468 children.

The principal grants to voluntary schools are provided under the Miscellaneous Grants Regulations, 1925. In normal circumstances these grants are limited to the amount of the deficit of funds required to meet approved expenditure. The following limiting conditions are also imposed on the amount of grant payable to the various types of schools :

Secondary schools—one-half of the approved expenditure or £10 [1] per pupil, whichever is the less.

Schools for blind, deaf, etc.—the income from local sources.

Orphanages—50*s.*[1] per pupil.

The two latter classes of schools also receive a grant of 3*s.* per pupil in average attendance. In addition, a grant is paid to voluntary managers in aid of their expenditure in contributing towards teachers' pensions.

The following table shows the expenditure of voluntary schools in the year 1931–2, and the sources from which it has been met :

Expenditure met from :	*Secondary Schools*	*Residential Schools for Blind, Deaf, etc.*	*Orphanages* [2]
	£	£	£
Department's Grants	79,482	13,361	1,321
Contributions from Education Authorities	29,195	16,382	2,519
Fees, Endowments, Subscriptions, etc.	122,290	19,886	1,174
Totals	£230,967	£49,629	£5,014

[1] As a measure of national economy these rates have been reduced by 10 per cent.

[2] In the case of orphanages, the cost of board and clothing is not included in the expenditure which is aided from grants.

Provision is made for the technical education of adult blind persons at the four central asylums for the blind at Aberdeen, Dundee, Edinburgh and Glasgow. The number of such persons undergoing training on July 31st, 1932, was 302. The expenditure of the institutions on this service in 1931–2 amounted to £24,421, of which £12,084 was met from contributions from Education Authorities.

In the session 1931–2, Continuation Classes were conducted in four centres under voluntary management at a cost of £12,254, of which £8,464 was met from grants.

IV. EDUCATION AUTHORITIES. NOTES ON TABLE 9

(a) Income

1. Rates and Taxes

The net expenditure of £12,122,359 was met in the following proportions :

	£	
Education Grants . . .	6,881,538 = 56·8	per cent.
Rates and Derating Grants . .	5,240,821 = 43·2	,,

The Education Grants referred to above include only direct grants from the Education (Scotland) Fund. The " Other Income " amounting to £50,000, as shown in Table 9, includes the following grants :

	£
From the Treasury under the Highland Schools Act, 1872	790
From the Ministry of Labour for Junior Instruction Centres[1]	30,075
From the Unemployment Grants Committee towards annual loan charges	2,015

2. Capital Receipts

Income for capital purposes (i.e. loans raised, proceeds of sale of property, etc.) amounted to £1,378,096.

3. Grants to Education Authorities

Apart from minor grants of small amount, all direct grants flow to the local authorities from the Education (Scotland) Fund through the channel of the Education Authorities (Scotland) Grant Regulations, the grants being paid in monthly instalments. As the regulations provide grants in respect of the financial year of the authorities which normally ends on May 15th, the account of the Fund in any Exchequer financial year ending on March 31st shows payments under at least two issues of the annual grant regulations in addition to adjusting payments under the regulations of earlier years.

The regulations for 1933–4 are estimated to provide for the distribution of approximately £6,165,000, each authority receiving a sum calculated as follows :

(*a*) £4 1*s*. 3*d*. per scholar (average enrolment).
(*b*) £104 5*s*. per teacher.

[1] There has been a rapid growth in the expenditure on Junior Instruction Centres in recent years (1929–30, £9,905 ; 1930–1, £22,846 ; 1931–2, £35,254). This expenditure has been mainly met by grants from the Ministry of Labour.

TABLE 9

INCOME AND EXPENDITURE OF SCOTTISH EDUCATION AUTHORITIES FOR THE YEAR 1931–2

(See Notes on following pages)

INCOME

SOURCE	COUNTIES ONLY	COUNTIES[1] OF CITIES ONLY	SCOTLAND	
			AMOUNT	PERCENTAGE OF TOTAL INCOME
	£ (000)	£ (000)	£ (000)	
Education Grants	4,669	2,213	6,882	55·6
School Fees	57	114	171	1·4
Endowments	20	3	23	0·2
Other Income	27	23	50	0·4
Balance to be met from Rates and Derating Grants	2,947	2,294	5,241	42·4
Total	7,720	4,647	12,367	100

EXPENDITURE

ITEMS	COUNTIES ONLY	COUNTIES OF CITIES ONLY	SCOTLAND	
			AMOUNT	EXPRESSED AS A SUM PER SCHOLAR[2]
	£ (000)	£ (000)	£ (000)	shillings
Salaries of Teachers (including Authorities' contributions towards teachers' superannuation, etc.)	5,160	2,959	8,119	217·0
Maintenance Expenses of Schools	1,180	694	1,874	50·1
Loan Charges (Interest, repayment, etc.—including capital expenditure met directly from revenue)	520	431	951	25·4
Administration	238	166	404	10·8
Bursaries and other forms of assistance to pupils and students	205	37	242	6·5
Other Expenditure	417	360	777	20·7
Total	7,720	4,647	12,367	330·5

[1] *Burghs of Aberdeen, Dundee, Edinburgh and Glasgow.*

[2] *These costs are based on the total number of pupils in average attendance in day schools for the year* 1931–2 (748,342 *pupils*).

(*c*) A fixed scheduled sum.
(*d*) Subject to certain conditions, a grant in respect of contributions made by the authority towards the maintenance of voluntary schools within the area.

Less the produce of a rate of 5*d.* in the £ on the rateable value of the area (the amount of this deduction is limited to 4*s.* per head of population).

Certain " necessitous " areas (Argyll, Caithness, Inverness, Orkney, Ross and Cromarty, Sutherland and Zetland) may, in addition, receive special grants determined by the Department after review of their financial needs.

Items (*a*) and (*b*) refer to scholars attending, and teachers employed in, schools conducted by the authority. The students and part-time teachers in Continuation Classes are included by reckoning 800 hours of instruction or teaching as equivalent to one day-school scholar or full-time teacher. For purposes of grant, no distinction is made between the various classes of scholars, e.g. primary, secondary, etc. Similarly the same rate of grant is paid in respect of all teachers, irrespective of whether they are graduates or non-graduates, or are employed in primary, secondary or other types of schools. Only qualified teachers are allowed to reckon for grant. The " fixed scheduled sum " under (*c*) above calls for some explanation. Prior to 1928 special grants were paid in respect of (i) each teacher employed in excess of the number required to provide one teacher for each 35 scholars, (ii) each student in training as a teacher from the area, and (iii) small schools with less than 100 scholars. In 1928 these grants were stereotyped at the amount which each authority had received in the previous year. The purpose of this change was to meet difficulties in connection with the closure of small schools and the centralisation of pupils in larger schools. The " excess teacher " and " small schools " grants had been introduced into the scheme of distribution in order to meet the special financial burdens which the maintenance of small country schools necessarily imposed upon the authorities of sparsely populated areas. In such areas the advantages of a policy of centralisation were negatived by the resulting loss of grant. The stereotyping of these grants accordingly left the authorities free to make full use of increasing transport facilities for the improvement of educational provision within their areas.

Deduction may be made from the grant if the Department are not satisfied as to attendance, organisation, instruction or educational provision (including medical inspection and treatment) within the authority's area. It is also a condition of grant that the salaries of teachers meet the requirements of the Minimum National Scales.

The regulations aim at placing in the hands of each authority a share of the total grant available, which is determined on broad principles in relation to school population, teaching staff and rateable value. The educational organisation of each area is conceived as being sufficiently comprehensive to make it unnecessary to measure the claim for grant-aid by narrow or restrictive standards. At the same time each authority is left with complete freedom, subject to the requirements of the Statutes and Code, to apply the money in the manner best suited to the needs of the area.

The grants paid under the regulations provide contributions to the net expenditure of individual authorities varying from 44 per cent. in the case of Edinburgh to upwards of 80 per cent. in the case of Zetland.

(b) Expenditure

1. Expenditure of Education Authorities

It is not possible, either for administrative or accounting purposes, to make the clear-cut distinction between elementary and higher education which characterises the organisation of education in England and Wales.

In the year 1931–2 the expenditure of education authorities from revenue account amounted to £12,367,537. In order of their amounts the principal items included in this total are: Salaries, etc., of teachers (62·6 per cent.); maintenance expenses of schools, i.e. fuel, light, cleaning, repairs, rent, rates, taxes, books, apparatus, etc. (15·2 per cent.); interest and repayment of loans, including capital expenditure met direct from revenue account (7·7 per cent.); administration (3·3 per cent.); contributions to Teachers' Superannuation Scheme (3 per cent.); bursaries, travelling, and maintenance allowances, etc. (2 per cent.). The remaining 6·2 per cent. of the total expenditure covers a large number of services in the following order: medical examination and treatment; contributions to schools and institutions under Sections 9 and 10 of the Act of 1918; meals and clothing; conveyance and maintenance of defective children; reformatory and industrial schools; rural libraries, and a number of miscellaneous items.

2. Teachers' Salaries

In 1931–2 the expenditure of £7,747,458 under this head (exclusive of authorities' contributions to the Superannuation Scheme) was made up as follows:

	£
Salaries of Teachers:	
Day Schools	7,445,686
Continuation Classes	253,639
Retiring allowances granted by Authorities to Teachers	48,133

Teachers' salaries in each area are paid in accordance with a scheme framed by the education authority and approved by the Department. Every scheme must provide for salaries not less in amount than those prescribed by *Minimum National Scales* laid down by the Department after consultation with representatives of the education authorities and the teaching profession. The following statement shows the main features of the Minimum National Scales which were in force from February 21st, 1928, until October 1st, 1931, when, in accordance with measures of national economy, the scales *were reduced by one-twelfth.* A further reduction was made in May 1933, when the scales of 1928 were reduced by *one-tenth.*

(*N.B.*—The undermentioned amounts are now subject to reduction by one-tenth.)

	£
Certificated Teachers trained for Two Years or Less:	
Men	150–10–250
Women	130–5–150–10–200
Certificated Teachers (Graduates):	
Men	200–10–300–15–360
Women	180–10–300
Teachers[1] *qualified under Chapter V of the Regulations for the Training of Teachers:*	
Men	230–10–310–15–400
Women	200–10–350

In addition to the classifications shown above, the Minimum National Scales provide intermediate scales for certificated teachers with three or four years' training, as well as additional payments at prescribed rates for posts of special responsibility, e.g. head teachers, etc. Apart from these additional payments, the salary of a teacher under the Minimum National Scales is, in most cases, determined by qualification and length of service, irrespective of the type of school in which he is employed.

[1] These teachers are normally honours graduates and are mainly employed in secondary schools.

It is open to authorities to provide salaries in excess of the Minimum National Scales, and in some areas the general level of salaries has been appreciably higher than would be secured by application of the compulsory minima. As a result of the economies effected since 1931, the local salary schemes are now in much closer correspondence with the Minimum Scales.

The average salaries of full-time teachers of all grades employed by education authorities in 1930 were: men £384, women £246, men and women £281. It is not yet possible to ascertain the full effect of the recent economy measures on these figures of average salaries. The Minimum National Scales have now been reduced by one-tenth as from May 15th, 1933, and it is therefore open to authorities to reduce the salaries of those teachers who were formerly paid in accordance with the National Scales of 1928 by 10 per cent. In the case of the Glasgow area, where salaries were considerably in excess of the National Scales, the general reduction has amounted to 13¼ per cent. In other areas the reductions have ranged between 7 and 10 per cent.

(c) Economy Measures—1931

Under the "eleven-eightieths" arrangement, the reductions of education grants in England and Wales since 1931 have secured an automatic decrease in the amount of the Exchequer contributions to the Education (Scotland) Fund. The progressive reduction of the General Aid Grant payable into the Education (Scotland) Fund may be shown as follows:

	£ (000)
Original Estimates, 1931–2	7,398
Estimates 1931–2 as adjusted by economy proposals with effect from October 1st, 1931	7,016
Estimates 1932–3	6,539
Estimates 1933–4	6,326

Measured from the original estimates for 1931–2, the level of annual state-aid has fallen from £7,398,000 to £6,326,000 in 1933–4, a reduction of £1,072,000, or 14·5 per cent. The progressive diminution of the sum available for distribution to the education authorities has resulted in a corresponding reduction of the *per capita* rates payable in respect of scholars and teachers under the Grant Regulations. The adjustments of these rates corresponding to the estimates shown above have been as follows:

Scholar Grant: £4 15*s.* 6*d.* (Original Estimates 1931–2); £4 11*s.* 0*d.*; £4 4*s.* 6*d.*; and £4 1*s.* 3*d.* (1933–4).

Teacher Grant: £123 15*s.* (Original Estimates 1931–2); £117 15*s.*; £108 10*s.*; and £104 5*s.*

As the grants to education authorities are not calculated in direct relation to expenditure, the responsibility for adjusting local expenditure to the reduced grant-income has rested with the individual authorities subject in the case of teachers' salaries to the conditions imposed by the Minimum National Scales. The revisions of the Minimum National Scales have been referred to in the earlier notes on teachers' salaries. It is not yet possible to forecast with any accuracy the full effect of the measures which authorities have adopted to secure economies, but the estimates of expenditure for the year 1932–3 show a reduction of £683,000 on the original estimates for 1931–2. This sum closely corresponds with the reduction of the authorities' grants for the same period, and it is therefore apparent that, so far as the position is ascertainable for the country as a whole, there has not yet been any transfer of burden from taxes to rates as a result of the reduction of education grants in Scotland. The

expenditure of grant-aided schools and institutions under voluntary management has also been subject to review, and there is every indication that economies are being effected which correspond generally to those made by the local authorities.

V. FINANCIAL ITEMS NOT INCLUDED IN THE PRECEDING TABLES

1. Reformatory and Industrial Schools

(Now described as "Approved Schools")

Apart from small grants paid from the Education (Scotland) Fund in respect of vagrant children, the grants for this service are provided by the parliamentary Vote for Reformatory and Industrial Schools, Scotland. In the case of schools maintained by education authorities the grants payable amount to one-half the approved net expenditure, together with a further grant of one-half of the net amount of parental contributions. In the case of voluntary schools, the same principle of dividing the cost between the Exchequer and the local authorities is applied, but the local authorities are required to pay, for each child committed, a fixed rate based on the average cost for all the schools in Scotland, while the Exchequer grant is based on the actual cost of maintaining the school to the limit of expenditure approved by the Department. In addition, a sum of £2,750, known as the Variable Grant, is available for distribution by the Department to meet special claims which arise in the cases of individual schools. Grants in aid of the Auxiliary Homes are paid at the rate of 3*s*. per week for all committed children up to 18 years of age.

The following table shows the income and expenditure of the schools and homes in the year 1931–2.

	Twenty-three "Approved Schools" (1,658 *scholars*)	*Seven Auxiliary Homes* (172 *children*)	*Total*
	£	£	£
Grants	51,777	352	52,129
Receipts from Local Authorities	55,616	1,831	57,447
Other Receipts	15,218	3,838	19,056
Total expenditure met as shown above	£122,611	£6,021	£128,632

In the same year a sum of £832 was spent from the parliamentary Vote for expenses of the collection of parental contributions amounting to £4,139, which were appropriated in aid of the Vote. Other expenses of central administration and inspection fall on the Vote for Public Education, Scotland.

2. Educational Endowments

The whole field of educational endowments is now under review by Commissioners appointed under the Educational Endowments (Scotland) Acts, 1928 and 1931. The previous Commission appointed in 1882, during the seven years of its office, dealt with 821 endowments (with an estimated annual value of about £200,000) and, by amalgamations, reduced these to approximately 400. The investigations of the existing Commission show that there is a considerable increase in the number and value of the endowments to be reviewed. The Commissioners estimate that over 1,400 endowments fall within their jurisdiction.

In their fourth report, issued in April 1933, the Commissioners state

that the statutory procedure preliminary to the publication of schemes has been completed in 25 of the 35 education areas, while for 18 of these areas draft schemes have already been published. The following figures concerning 15 important schemes referred to in the third report of the Commission indicate points of interest with regard to amalgamation of endowments and allocation of income.

Number of Schemes		15
,, ,, Endowments involved		264
,, ,, these Endowments administered by Education Authorities		150
Income available for various educational purposes under these schemes formerly allocated to :		
(*a*) Bursaries :	£	£
University	1,300	
School	534	
Post-school	1,971	
Not specified	9,004	
		12,809[1]
(*b*) Prizes		771
(*c*) Maintenance of Schools and Institutions		3,315
(*d*) Miscellaneous		536
Total		£17,431

VI. COMBINED FIGURES OF INCOME AND EXPENDITURE OF PUBLIC EDUCATION IN SCOTLAND

Table 10 shows the combined figures of educational expenditure aided from public funds (i.e. grants or rates). The figures are based on ascertained expenditure for the year 1931–2, or the nearest accounting period for which information is available. The statement mainly covers expenditure for maintenance purposes, but it includes payments on account of interest and repayments of loans (sinking fund charges, etc.), and also capital expenditure met from revenue account. The capital expenditure of the National Committee for the Training of Teachers is met from direct capital grants and current revenue, and has been included. Information with regard to capital expenditure on universities, voluntary schools, etc.—except so far as it is met from revenue—is not available in a form which makes it possible to bring the figures to account in this statement. In some cases the figures do not correspond with those given in the previous paragraphs, owing to the need for adjusting the combined figures in respect of cross entries—especially in connection with the contributions of education authorities and other school managers to the Scottish Teachers' Superannuation Schemes. In the case of the expenditure of education authorities, the figures offered are *net* after deducting cross entries in respect of income or expenditure included under other services.

[*Contributed.*]

[1] Of this sum £10,241 was set apart for assisting persons of the poorer classes.

TABLE 10

PUBLIC EDUCATION, SCOTLAND—INCOME AND EXPENDITURE (COMBINED FIGURES)

SERVICE	INCOME FOR THE YEAR 1931–2						EXPENDITURE	
	GRANTS		RATES, ETC.[1]		OTHER SOURCES		TOTAL EXPENDITURE (1931–2)	CORRESPONDING FIGURES FOR THE YEAR 1930–1[5]
	AMOUNT	PERCENTAGE OF TOTAL	AMOUNT	PERCENTAGE OF TOTAL	AMOUNT	PERCENTAGE OF TOTAL		
	£ (000)		£ (000)		£ (000)		£ (000)	£ (000)
1. Universities[2]	329	41	—	—	467	59	796	783
2. Scottish Education Department (Administration, Inspection and Royal Scottish Museum)	153	100	—	—	—	—	153	158
3. Education Authorities (net)[3]	6,688	57	4,887	41	212	2	11,787	12,069
4. Central Institutions	114	45	12	5	129	50	255	269
5. Agricultural, etc., Colleges	71	58	13	10	39	32	123	122
6. Training of Teachers	85	39	76	35	56	26	217	201
7. Superannuation of Teachers (Statutory Schemes only)	274	29	173	19	485[4]	52	932	807
8. Voluntary Schools, etc.	121	39	39	12	152	49	312	325
9. Reformatory and Industrial Schools	48	38	58	44	23	18	129	138
Totals (1931–2)	7,883	54	5,258	36	1,563	10	14,704	—
Corresponding figures for 1930–1[5]	7,646	51	5,650	38	1,576	11	—	14,872

[1] *The figures shown represent the amounts falling to be met from rates and from grants under Part III of the Local Government (Scotland) Act, 1929 (derating grants).*

[2] *Excluding the expenditure of the Royal Technical College, Glasgow, which is included under Central Institutions.*

[3] *Figures are* net *after deduction of expenditure accounted for under other heads. The principal adjustments are :*

(*a*) £41,000 *has been transferred from education authorities' grants to grants in lines* 6 *and* 8 *on account of grants paid to authorities in respect of their contributions to voluntary schools.*

(*b*) £354,000 *has been transferred from rates (line* 3) *to rates in lines* 4 *to* 9, *on account of the contributions of education authorities towards which they receive no direct grants. This sum also includes the* net *contribution of authorities to the expenses of teachers' superannuation.*

[4] *This figure includes the contributions of teachers and the* net *contributions of employers (other than education authorities) to the expenses of teachers' superannuation.*

[5] *These figures show some variation from the figures in the last edition of the* YEAR BOOK *owing to adjustments made on receipt of audited accounts.*

CHAPTER FOUR

Survey of Education Expenditure in Scotland during Twelve Years

IT has seemed desirable to add perspective and background to the sketch of the present position of educational finance in Scotland which has been outlined in Chapter Two, by a survey of expenditure on the same lines as that for England and Wales in the YEAR BOOK for 1933. This survey will cover the last twelve years, with some reference to the relative levels of pre-war and post-war expenditure. It will deal mainly with the expenses of central administration and with those services which are directly aided from the Education (Scotland) Fund. Expenditure on Universities, Agricultural Education, Reformatory and Industrial Schools, the Royal Scottish Museum and the post-war scheme of Higher Education of Ex-service Men has not been included.

I. Total Expenditure and Income

An accurate aggregation of educational expenditure presents considerable difficulties owing to the different accounting periods for the several services and to the cross-entries which occur in the accounts. Accordingly, the figures in Table 11 have been compiled on the basis of the sources from which expenditure has been met. In this way the misleading effects of cross-entries have been avoided, and the broad tendencies to fluctuation in total expenditure may accurately be assessed. These broad tendencies will be reviewed before passing to a more detailed analysis of the expenditure of education authorities.

Four well-defined phases may be observed from the figures of total expenditure in Table 11.

(a) *The rapid rise during the latter war and early post-war years to the "peak" figure of £12,536,000 in 1921–2, an increase of £7,360,000 or 142 per cent. on the expenditure of £5,176,000 for the year 1913–14.*

In addition to the economic effects of the war on cost of material, level of wages, etc., which led to a rapid increase in the cost of education, the Education (Scotland) Acts of 1918 and 1919 introduced changes of far-reaching effect. In 1919, upwards of 900 parish and burgh school boards gave place to 38 education authorities who were empowered to organise education on a broader basis. At the same time the denominational schools which were estimated to provide for roughly one-seventh of the school population were transferred from the church authorities to the management of the education authorities. Under the Act of 1919 a non-contributory scheme for teachers' pensions was substituted for the contributory scheme which had been in operation since 1911. Further, the post-war conditions of unemployment had given a new significance to the powers of education authorities in connection with the provision of meals and clothing for necessitous children. It is not possible to assess the financial effects of these several changes with any degree of precision, but some items may be isolated to account for part of the increase of expenditure, e.g.:

(i) *Meals and Clothing of Necessitous Children* cost £351,000 more in 1921-2 than in 1913–14 when only £7,000 was required for this service.

(ii) *The Charge for Teachers' Superannuation* in 1913–14 consisted of the contributions of the Scottish Education Department, school managers and teachers to the Superannuation Fund established under the scheme of 1911. This annual charge amounted to £254,000 in 1913–14. In 1921–2 the whole cost of pension benefits, amounting to £380,000, was borne

TABLE 11

TOTAL EXPENDITURE ON EDUCATION IN SCOTLAND AIDED FROM THE EDUCATION (SCOTLAND) FUND[1]

YEAR	TOTAL EXPENDITURE	MET FROM						
		EDUCATION GRANTS						
		TO LOCAL EDUCATION AUTHORITIES AND VOLUNTARY SCHOOLS, ETC.[2]		CENTRAL ADMINISTRATION AND INSPECTION (SCOTTISH EDUCATION DEPARTMENT)	DEFICIT FALLING TO BE MET FROM RATES AND DERATING GRANTS	FEES	OTHER LOCAL INCOME (ENDOWMENTS, ETC.)	TEACHERS' CONTRIBUTION TO SUPER-ANNUATION
		AMOUNT	PERCENTAGE OF TOTAL EXPENDITURE					
	£ (000)	£ (000)		£ (000)	£ (000)	£ (000)	£ (000)	£ (000)
1913–4	5,176	2,609	50·4	71	2,022	194	177	103
1921–2	12,536	7,355	58·7	130	4,425	397	229	—
1922–3	11,489	6,155	53·5	113	4,319	413	201	288
1923–4	11,582	5,854	50·6	111	4,647	411	198	361
1924–5	11,934	6,222	52·1	114	4,619	414	197	368
1925–6	12,427	6,342	51·0	118	4,953	418	206	390
1926–7	12,820	6,481	50·5	118	5,199	427	211	384
1927–8	12,890	6,477	50·3	117	5,269	438	196	393
1928–9	13,158	6,530	49·6	117	5,482	430	195	404
1929–30	13,623	6,605	48·5	120	5,854	431	199	414
1930–1	14,020	6,965	49·7	121	5,843	437	231	423
Original Estimates 1931–2	14,145	7,494	53·0	120	5,439	437	234	421
Actual 1931–2	13,713	7,299	53·2	118	5,241	435	210	410
Estimates 1932–3	13,550	6,795	50·1	114	5,555	449	238	399

[1] *Expenses of central administration and inspection (Scottish Education Department) are also included.*

[2] *Includes grants towards Training and Superannuation of Teachers, Central Institutions and expenses of the Leaving Certificate Examination.*

by the Education (Scotland) Fund—an increase of £126,000 on the charge for 1913–14.

(iii) *The Cost of Teachers' Salaries* (including the retiring allowances granted by school managers) rose from £2,797,000 in 1913–14 to £7,580,000 in 1921–2. But this increase of £4,783,000 was not entirely due to the higher post-war remuneration of teachers. During the period from 1913–14 to 1921–2 the number of teachers employed had risen by approximately 2,500. Allowing for these additional teachers at the average cost in 1921–2, some £700,000 of the increased expenditure may be attributed to the additional numbers employed. This leaves an excess of £4,083,000 on the 1913–14 figure of £2,797,000—an increase of 146 per cent.—to be accounted for by the higher rates of pay. As the index figure of the average cost of living during the year 1921 was 126 per cent. above the 1914 index figure of 100, it is clear that, in 1921, the greater part of the rise in the level of teachers' remuneration since 1914 could be justified by the higher cost of living.

The foregoing items account for £5,260,000 of the total increase of £7,360,000 on the expenditure of 1913–14, leaving a balance of £2,100,000 to be accounted for by the economic effects of the war on the cost of school maintenance, etc., the stimulus of the Act of 1918, and other changes. When allowance is made for the increased cost of material and wages, the financial effects of the transfer of the denominational schools, the development of school medical services, and the increased demand for secondary education which was a feature of post-war educational conditions, the figures do not suggest that any substantial part of the total increase during this period was open to serious criticism.

(b) *The fall from the "peak" figure of £12,536,000 in 1921–2 to the figure of £11,489,000 in 1922–3, i.e. by £1,047,000*

This sudden fall in expenditure was mainly due to the economy measures adopted on the recommendations of the "Geddes" Committee, and also coincided with a rise in the purchasing power of the pound. The total saving was made up as follows:

	£ (000)
Meals and Clothing of Necessitous Children	274
Teachers' Salaries (Day Schools)	239
Teachers' Salaries (Continuation Classes)	94
Expenses of School Maintenance	225
Administration (Central and Local)	49
Other Net Savings (Miscellaneous)	166
Total saving	1,047

In addition to this saving of expenditure, the charge to public funds was further reduced by the contribution of teachers towards their pensions (£288,000). There was a net saving on grants of £1,197,000 and a corresponding saving of £106,000 on rates. It may be remarked, however, that the full effect of the saving on grants was not reached until the Exchequer financial year 1923–4. Also it was not until the local financial year ended on May 15th, 1924, that the expenditure of the education authorities reached its lowest point. Owing to the effects of teachers' pensions and to an increase in the expenditure of schools and institutions under voluntary management, the total expenditure for the year 1923–4 was slightly in excess of the expenditure for the previous year. Broadly speaking, the full effect of the "Geddes" economies may be regarded as extending into the financial year 1923–4.

(c) *A gradual rise in expenditure from the year* 1922–3 (£11,489,000) *to the "peak" of* £14,020,000 *in the year* 1930–1, *i.e. an increase of* £2,531,000

It has been explained that the first year of this phase, viz. 1923–4, more properly belongs to the period dealt with under (b). On the other hand, the full "peak" position is not shown by the year 1930–1, but by the original estimates for the year 1931–2. For several months of that year, i.e. from May until October 1st, 1931, when the national economy measures were introduced, expenditure had proceeded on the level of the original estimates for that year. The increase between 1922–3 and the original estimates for 1931–2 was £2,656,000—an increase of 23 per cent. With the exception of the period between 1926–7 and 1927–8, when the rise was only £70,000, the annual increases tended to fluctuate between £400,000 and £500,000. In assessing the full measure of increase in educational expenditure, the rise in the purchasing power of the pound cannot be ignored. For 1923 the average cost of living index figure was 74 per cent. above the pre-war level; the corresponding percentage for 1931 was 47·5.

The total increase of £2,531,000 during the period 1922–3 to 1930–1 was made up approximately as follows:

	£ (000)
Teachers' Salaries	1,300
Teachers' Superannuation	310
School Maintenance	326
Loan Charges	185
"Special" Services (Medical Services, Meals and Clothing, Bursaries, etc.)	160
Administration (Central and Local)	55
Miscellaneous	195
	2,531

This period of over eight years was one of steady development. In its earlier phases, the education authorities were concerned with the growing demand for secondary education, and with the reorganisation of post-qualifying education and the development of advanced divisions on the lines suggested in the Department's Circular No. 44 (December 1921). During the latter part of the period, the authorities were faced with the problems of school accommodation, staff and organisation arising from the proposals for raising the school age.

The increase under the head of teachers' salaries is mainly accounted for by the steady rise in the number of teachers employed and the higher proportion of graduate teachers entering the service. The total number of teachers increased from 25,000 to 28,000 during this period, the corresponding numbers of university graduates included in these figures being 5,000 and 9,000 respectively.

The last year of the period marked the replacement of *ad hoc* education authorities by the councils of the counties and of the four great burghs. This administrative change, while involving considerable adjustment of accounting arrangements, had little effect on the immediate level of expenditure.

(d) *A sharp fall from the original estimates for the year* 1931–2 (£14,145,000) *to the estimates for the year* 1932–3 (£13,550,000)

This downward turn of educational expenditure is entirely due to the measures of national economy adopted in October 1931—although it should perhaps be mentioned that the education authority of the City of Glasgow made provision for economy measures from the beginning of the financial year 1931–2. Otherwise the original estimates for that year would have been roughly £200,000 in excess of the figure stated in Table 11.

The reduction of the expenditure of education authorities and other school managers is actually greater than the net reduction of £595,000 would indicate. In 1932–3 expenditure on teachers' pensions was nearly £140,000 in excess of the original estimates for 1931–2, so that the net reduction of £595,000 represents a saving on educational expenditure other than teachers' pensions of upwards of £730,000. Practically the whole of this saving has accrued to the national Exchequer by the reduction of grants, and about two-thirds of it has been found by the reduction of teachers' salaries.

It is not yet possible to forecast how long the downward tendency in the level of expenditure may continue. Complete figures of actual expenditure for the year 1932–3 are not yet available, but there are indications that the actual out-turn figures may show savings on the estimates. It also appears that, in framing their budgets for the year 1933–4, the authorities are endeavouring to secure economies to meet the reduction of £230,000 in the grants for that year. In many cases local administrators are investigating the possibilities of economies in school staffing in preference to further reduction of the salaries of teachers. This policy is suggested by the rapid rise in the number of teachers employed in recent years, and by the prospect within the next few years of a fall in the numbers of children—especially in the higher classes which require a liberal standard of staffing.

II. Incidence of Contributions towards Expenditure on Education

During the twelve years under review, the total expenditure has risen from £12,536,000 (1921–2) to £13,550,000 (1932–3), i.e. an increase of £1,014,000, which has been met as follows :

TABLE 12

	£ (000)	£ (000)
Increase in Rates, etc.	1,130	
Increase in Fees	52	
Increase in other Local Income	9	
Increase in Teachers' Contributions towards Pensions	399	
		1,590
Offset by Decrease in Grants		576
Net Increase		1,014

Transfer of Burdens from Taxes to Rates

The above figures show that the increase in rates has more than covered the whole increase in expenditure, while the increased receipts from fees, local income and the teachers' contributions towards their pensions have been used to reduce the contributions of the national Exchequer. To those whose interest is mainly in the local services of education, the inclusion of expenditure on teachers' superannuation and central administration may appear to introduce misleading factors. Accordingly, the figures on page 224 have been adjusted to show only the net expenditure on local education services which has been met from public funds.

While the increase of the sum met from rates, etc., is not so great as in the aggregated figures, the indication of transfer from rates to taxes is more apparent, owing to the fact that the fall in the grants for local services has been to some extent offset by the increase in the grants for teachers' superannuation.

If the percentage of state-aid in 1921–2 had been maintained, the increase of £369,000 in net expenditure would have been met by grants and rates in the proportions of £231,000 and £138,000. On this basis the amount

TABLE 13

YEAR	NET EXPENDITURE	EDUCATION GRANTS		DEFICIT MET FROM RATES AND DERATING GRANTS	
		AMOUNT	PERCENTAGE OF NET EXPENDITURE	AMOUNT	PERCENTAGE OF NET EXPENDITURE
	£ (000)	£ (000)		£ (000)	£
1921–2	11,467	7,182	62·6 [1]	4,285	37·4
1932–3	11,836	6,465	54·6 [1]	5,371	45·4
			(based on estimates)		
	Net increase of £369,000	Decrease of £717,000		Increase of £1,086,000	

[1] *The corresponding percentage figures for education authorities' grants alone were* 60·8 (1921–2) *and* 53·4 (*Estimates* 1932–3).

of the transfer from taxes to rates may be taken at the figure of £948,000. It is, however, only fair to point out that in other directions the indirect contributions of the national Exchequer towards educational expenditure have greatly increased. The net grants in aid of teachers' superannuation have increased from £173,000 in 1921–2 to £330,000 in 1932–3. In addition the State has provided a large contribution towards all rate-borne expenditure by means of the derating grants under the Local Government (Scotland) Act, 1929. Prior to 1929 the only derating grants were those under the Agricultural Rates, etc. (Scotland) Acts, and in 1921–2 the amount of such grants applicable to education rates was only £49,000. It is estimated that the share of the derating grants provided under the Act of 1929 which may be regarded as attributable to rate-borne expenditure on education is not less than £1,500,000. While this Exchequer contribution was not in any way granted in substitution for *ad hoc* education grants, it cannot be wholly ignored in considering the relationship of grants and rates in respect of educational expenditure.

It may also be pointed out that while there has been a substantial transfer from taxes to rates during the period from 1921–2 to 1932–3, there had been a considerable transfer in the opposite direction between 1913–14 and 1921–2. In 1913–14 the percentage of state-aid corresponding to the 1921–2 figure of 62·6 per cent. was 56 per cent. As a result of the economy measures of 1931–2, there has been a great reduction in the amount of grants-in-aid, but it will be seen from Table 11 that the rate burden for 1932–3 shows very little increase on that for 1928–9. The general movement may be summed up by saying that as a result of the Geddes economies the national Exchequer had succeeded by 1928 in recovering the pre-war position as regards the proportion of state-aid; that expenditure from grants and rates rose rapidly thereafter until the economy measures of 1931–2; and that the results of those economies are now tending towards a return to the levels of grants, rates and expenditure of the year 1928–9.

Grants and Rates

Apart from the variation in the annual grants from the Local Taxation (Scotland) Account which ceased when these payments were stereotyped at the figure of £586,842 by the Local Government (Scotland) Act, 1929, the amount of the grants available for education in Scotland has been

determined by the " eleven-eightieths " arrangement embodied in the Act of 1918. It is therefore necessary to turn to the grant expenditure in England and Wales to ascertain the direct causes of the main fluctuations of the Scottish grants. The movements of grants and expenditure in England and Wales during the last ten years have been described in Chapter Two of this section. It will be observed, however, from the figures in Table 11 that the fluctuations of the Scottish grants have caused considerable disturbance in the incidence of rates in Scotland. Education authorities have not always been able to adjust their expenditure to a reduction in grants (cf. grants and rates figures for 1922–3 and 1923–4). Sometimes increasing expenditure has outstripped increasing grants (cf. 1927–8, 1928–9 and 1929–30). On the other hand, there have been occasions when the increases of grant have not wholly been required for new expenditure, and have therefore been partially used for reduction of rates (cf. 1929–30, 1930–1 and original estimates for 1931–2). These difficulties of financial adjustment are inherent in the " eleven-eightieths " arrangement, but it will be seen that, over long periods, the effects of these irregularities are dispersed, and the measure of state-aid bears much the same relation to expenditure in Scotland as in England and Wales.

Two points of interest may be mentioned. In the earlier years of the period under review, considerable disturbance was caused by the effects of over-estimating the grants for England and Wales. Under the statutory arrangement, the grants paid to the Education (Scotland) Fund are based on the *estimates* of English grants and an adjustment to actual expenditure is made when the out-turn of the English Vote is determined by the Appropriation Account, i.e. two years after the payments based on estimates have been actually made to the Education (Scotland) Fund. In effect, this means that the Scottish education authorities may be called upon to refund money which they spent in good faith two years before. If the amount is large, this refund may seriously disturb the Scottish grants, e.g. in 1924–5 the Scottish equivalent moneys were reduced by £473,000 in respect of over-estimating the English grant for 1922–3. For some years past, however, such adjustments have not been of sufficient dimensions to cause any serious difficulty.

The second point concerns the effect of the recent changes of grant policy in England and Wales on the foundations of the " eleven-eightieths " arrangement. When the Scottish Act of 1918 was passed, there was some misgiving in the minds of local authorities in Scotland as to whether the fixed proportion of English grant expenditure would yield sufficient grant-aid for the contemplated development of public education in Scotland. But the provision in the English Act of 1918, whereby local education authorities were guaranteed grants of not less than 50 per cent. of net approved expenditure, was regarded as a safeguard against the possible failure of English grants to secure adequate equivalent grants for Scotland. As a result of the economy measures of 1931, the statutory guarantee of 50 per cent. grants in England and Wales was withdrawn, and at the same time the grant-percentage of expenditure on teachers' salaries was reduced from 60 to 50. Apart from the immediate loss of grants involved, these changes may tend to restrict the expansion of grants in many of the most progressive areas in England and Wales.

Fees

The figures under this head in Table 11 include fees of pupils and students in State-aided Day Schools, Central Institutions and Training Colleges. The figures for Central Institutions also include " returns for expenditure incurred," while the basis of fee receipts of students in training has greatly changed since the reorganisation of the training arrangements under the National Committee for the Training of Teachers. It is therefore not safe to draw conclusions from the aggregated figures. The figures of fee receipts for the state-aided schools alone are given in the table on page 226.

TABLE 14

	1913–4	1921–2	1931–2
	£ (000)	£ (000)	£ (000)
Education Authorities :			
(1913–4 School Boards)			
Day Schools	89	136	147
Continuation Classes		17	24
Under Voluntary Management :			
Denominational " Code " Schools (1913–4 only)	4	—	—
Secondary Schools	48	89	106
Totals	141	242	277

It will be seen that the fee income—mainly fees of pupils attending secondary schools—has kept pace with the increased cost of education, especially in the case of the secondary schools under voluntary management. The loss of fee income owing to the transfer of denominational schools to the authorities in 1919–20 was relatively trivial in amount.

Section 6 (1) (*a*) of the Act of 1918 provides that it shall be the duty of every authority to prepare " a scheme for the adequate provision . . . of all forms of primary, intermediate and secondary education in day schools . . . without payment of fees, and if the authority think fit, for the maintenance or support (in addition and without prejudice to such adequate provision as aforesaid) of a limited number of schools where fees are charged in some or all of the classes." This obligation to provide free secondary education has caused considerable difficulties of legal interpretation and of local adjustment. As a result a number of authorities adopted a policy of abolishing the payment of fees in secondary schools. This to some extent accounts for the smaller increase in fee income in the case of education authorities than in the case of voluntary managers of secondary schools. The Lovat Committee, however, recommended in 1932 that " where fees are exigible, these should be exacted if the financial position of parent or guardian so warrants." As a result of the efforts made in this direction by some authorities, the fee income for 1932–3 was estimated to be £15,000 in excess of the fee receipts for 1931–2.

" *Other Local Income* "

This subhead covers endowment income, subscriptions and miscellaneous receipts. The fortuitous nature of some of these items renders the aggregated figures of little use for comparative purposes, but the significant changes are apparent in Table 15.

It will be seen that over the whole period under review the miscellaneous receipts of education authorities have not shown any noteworthy change.

In considering the figures under *Voluntary " Code " Schools*, it should be borne in mind that in 1913–4 a considerable proportion (about one-seventh) of the primary-school population was to be found in these non-rate-aided denominational schools. It was remarked under the notes on fee income that the transfer of these schools to the management of education authorities in 1919–20 did not involve any great loss of fee income. But the above figures show that a considerable loss of voluntary subscriptions and receipts from church collections resulted from the transfer of the denominational schools. The schools shown under this head in 1921–2 and 1931–2 are orphanages and residential schools for defective children. The increase in miscellaneous income between 1921–2 and 1931–2 is accounted for by the inclusion of figures relating to the Training Centres for the Adult Blind.

TABLE 15

	1913–4	1921–2	1931–2
	£ (000)	£ (000)	£ (000)
Education Authorities :			
Endowments	21	30	23
Miscellaneous	19	26	18
Voluntary "Code" Schools (mainly Denominational Schools in 1913–4)			
Endowments	4	9	12
Subscriptions and Church Collections	60	11	10
Miscellaneous	13	4	9
Voluntary Secondary Schools :			
Local Income other than Fees	46	47	18
Central Institutions, etc.	14	35	54
Interest on the Residue of the Scottish Teachers' Superannuation Fund, etc.	—	67	66
Totals	177	229	210

The fall in the local income of *Secondary Schools under Voluntary Management* is accounted for partly by the transfer of four schools to the education authorities since 1921–2, and partly by the temporary application of endowment income to capital expenditure.

The *Central Institutions* have greatly developed since 1913–4 and the large increase in local income is a natural result of the policy of stimulating the interest of local industries and local authorities in the work of the institutions.

When the *Scottish Teachers' Superannuation Fund,* established under the Scheme of 1911, was abandoned on the introduction of a non-contributory scheme in 1919, the contributions of the teachers were returned to them with interest. The residue of the Fund, consisting of the contributions of the Department and the employers, with accrued interest, remained as invested by the National Debt Commissioners. These moneys may be regarded as mainly belonging to the education authorities in Scotland. The investments yield an income of about £66,000 annually, which becomes available to meet the pension obligations falling upon the Education (Scotland) Fund.

III. Teachers' Contributions towards Pensions

As teachers' superannuation has been one of the most disturbing elements in Scottish educational finance since 1919, and is the subject of widespread misunderstanding from the accounting point of view, it seems desirable to isolate these figures in Table 16 in order that it may be understood how the expenses of this service are brought to account in a comprehensive statement of educational expenditure. Under the Scheme of 1911, the contributions from the Department, teachers and employers were funded. The annual expenditure on pensions in 1913–4, to be included in the comprehensive account of educational expenditure, was thus the total amount of the annual contributions. The actual expenditure on pension benefits was met from the Superannuation Fund, and was not relevant to the general account of annual expenditure on education. The contributory scheme was wound up in 1919 and a non-contributory scheme instituted. From this stage, the expenditure on pension benefits became the criterion of annual cost—a cost met from the current revenue of the Education (Scotland) Fund, towards which the national Exchequer, under the "eleven-eightieths" arrangement, contributed grants in respect of teachers'

superannuation in England and Wales. In 1922, as a result of the Geddes Committee's recommendations, a contribution was exacted from the teachers. This was not, however, funded, but was simply applied to reduce the annual obligations of the national Exchequer for the payments to the Education (Scotland) Fund. After the first year, however, an adjustment was made to secure that the national Exchequer received, not the whole of

TABLE 16

EXPENDITURE ON SUPERANNUATION OF TEACHERS

YEAR ENDING MARCH 31ST	TOTAL EXPENDITURE ON PENSION BENEFITS ETC.[1]	EXPENDITURE MET FROM—			
		EXCHEQUER GRANTS (NET)[2]	INTEREST ON SECURITIES HELD TO ACCOUNT OF THE SCOTTISH TEACHERS' SUPERANNUATION FUND	TEACHERS' CONTRIBUTIONS	EFFECTIVE CONTRIBUTIONS OF EDUCATION AUTHORITIES AND OTHER EMPLOYERS
	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)
1921	408	184	68	—	156
1922	380	173	67	—	140
1923	496	(—) 45[3]	66	288[6]	187
1924	507	(—) 35[3]	67	361	114
1925	529	150	64	368	(—) 53[4]
1926	593	262	66	390	(—) 125[4]
1927	645	290	66	384	(—) 95[4]
1928	689	238	66	393	(—) 8[4]
1929	749	60	66	404	219
1930	770	162	66	414	128
1931	806	191	88[5]	423	104
1932	932	274	66	410	182

[1] *From* 1924–5 *this expenditure includes refund of teachers' contributions.*
[2] *From* 1928–9 *these figures are subject to some adjustment on account of the difference between the estimated and actual amounts of grants paid in England and Wales in respect of employers' contributions. These adjustments are not, however, of sufficient effect to disturb the general conclusions to be drawn from this table.*
[3] *In these years the teachers' contributions received by the Exchequer exceeded the grants in aid of superannuation paid to the Education (Scotland) Fund.*
[4] *In these years, the education authorities and school managers made no effective contribution.*
[5] *Includes a special receipt of £10,000 and, owing to a change in accounting methods, covers the interest payable for more than one year.*
[6] *Contributions were payable for ten months only in this year.*

the Scottish teachers' contributions, but eleven-eightieths of the sum contributed by teachers in England and Wales. This was the logical outcome of the "eleven-eightieths" arrangement under which the Education (Scotland) Fund accepted the higher obligation for Scottish pensions and received only eleven-eightieths of pension expenditure in England and Wales. In 1923 the employers in Scotland were asked to contribute. This was simply a gesture in support of a full contributory scheme—the employers' contributions being paid into the Education (Scotland) Fund and returned to the education authorities and other school managers in the form of grants. In 1926 a full contributory scheme was introduced

following the recommendations of the Emmott Committee. But no provision was made for funding the contributions. From 1928–9 a 5 per cent. contribution was exacted from the employers in England and Wales, towards which the State contributed roughly one-half in the form of grant. For Scotland the scheme was the same in theory, but its financial structure was adapted to the "eleven-eightieths" arrangement. The Education (Scotland) Fund was to receive the contribution of 5 per cent. from Scottish teachers and employers, together with the national Exchequer's contribution of eleven-eightieths of the net grants for pensions in England and Wales, i.e. the cost of benefits *plus* grants in aid of employers' contributions *less* the employers' and teachers' gross contributions. The Education (Scotland) Fund met the expense of Scottish pension benefits. Thus, while the Scottish employers nominally made a contribution of 5 per cent., of which roughly one-half was theoretically returnable in the form of grant, their effective contribution was simply the balance necessary to meet the charge on the Education (Scotland) Fund so far as this charge was not met by other receipts available for superannuation purposes. It will be seen from Table 9 that the effective contributions of employers (i.e. from rates or local sources of income) have varied considerably.

This table shows the curious effects of financing teachers' pensions from current revenue—a considerable part of the current revenue being the contributions of teachers and employers which are exacted on the actuarial basis appropriate to a "funded" scheme. The inequalities have been further accentuated by the complications of the "eleven-eightieths" arrangement. Thus, in 1921 and 1922, when no specific contribution was exacted from the employers, the education authorities actually made a substantial indirect contribution through the reduction of the balance of the Education (Scotland) Fund which would otherwise have been available for grants. On the other hand, while the education authorities nominally made a contribution in the years 1925–8, they made no *effective* contribution; their nominal contributions were returned to them in the form of grants from the Education (Scotland) Fund, while the grants were further inflated by a balance of superannuation receipts which were not required for current superannuation expenditure. The net contributions of the national Exchequer also show curious fluctuations. In the years ended March 31st, 1923 and 1924, the contributions of teachers paid to the Exchequer exceeded the grants paid into the Education (Scotland) Fund from the Exchequer on account of superannuation. If, however, superannuation expenditure for the whole period of ten years from April 1st, 1922, is considered, it will be found that the effective contributions of the teachers, of the national Exchequer, and of the employers (including interest on the residue of the 1911 Fund) are roughly in the true theoretical proportions of one-half, one-quarter, and one-quarter, respectively.

The steadily increasing charge for pension benefits was anticipated when the present scale of pension benefits was introduced. So far, the annual costs have not shown any serious divergence from the actuarial estimates indicated in the report of the Emmott Committee. These actuarial estimates were made on the assumption that there would be no substantial change in the general rates of salary or in the numbers and qualifications of teachers employed. In actual fact both the total number of teachers and the proportion of highly qualified teachers have greatly increased, while the general rates of salary have been reduced.

IV. Expenditure of Education Authorities

Apart from the expenses of teachers' superannuation which have been dealt with separately, the greater part of the expenditure aided from the Education (Scotland) Fund is reflected in the revenue accounts of the education authorities. Accordingly, the expenditure shown in these accounts for recent years has been analysed in Table 17 in order that tendencies to fluctuation may be examined under the main subheads of

TABLE 17

EXPENDITURE (REVENUE ACCOUNT) OF SCOTTISH EDUCATION AUTHORITIES

MAIN SUBHEADS OF EXPENDITURE	1913–4[1]	1921–2	1923–4	1925–6	1927–8	1929–30	1930–1	1931–2	ESTIMATES 1932–3	PERCENTAGE OF INCREASE BETWEEN 1913–4 AND 1931–2	PERCENTAGE OF INCREASE BETWEEN 1921–2 AND 1931–2
	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)	%	%
Administration	168	421	360	375	403	395	410	404	400	140	(*Decrease* 4)
Teachers' Salaries, etc.	2,694	7,369	7,021	7,419	7,643	8,022	8,343	7,747	7,593	188	5
Employers' Contributions for Teachers' Superannuation	49	—	136	183	369	388	394	371	366	(Not comparable)	
Other Expenses of School Maintenance [2]	701	1,819	1,597	1,773	1,821	1,973	1,906	1,874	1,835	167	3
Loan Charges and Capital Expenditure met from Revenue	557	603	615	675	717	760	829	951	981	71	58
Assistance to Pupils and Students (Bursaries, etc.)	66	211	225	261	255	251	254	242	229	267	15
Contributions to Voluntary Schools, Training of Teachers, Central Institutions, etc.	—	196	131	135	166	158	172	166	171	(Not comparable)	(*Decrease* 15)
Medical Examination and Treatment	50	121	125	139	153	168	176	177	176	254	46
Meals and Clothing	7	358	50	54	66	86	109	141	131	1,914	(*Decrease* 61)
Reformatory and Industrial Schools	34	82	54	49	59	46	42	42	39	24	(*Decrease* 49)
Miscellaneous	72	186	132	183	194	233	242	252	256	253	40
Totals	4,398	11,366	10,446	11,246	11,846	12,480	12,877	12,367	12,177	181	9

[1] *The expenditure shown for* 1913–4 *includes expenditure of School Boards, Secondary Education Committees and Managers of the Voluntary Schools conducted under the Code.*

[2] *This subhead covers fuel, light, cleaning, repairs, rent, taxes, insurance, books, apparatus, etc.*

expenditure. But before turning to notes on these subheads, it is desirable to take stock of those changes in educational data which cannot be ignored in reviewing the tendencies of expenditure. It is hardly necessary to point out that, while changes in the numbers and types of schools, pupils and teachers may greatly influence expenditure, these effects are not adequately registered by the usual statistical method of expressing expenditure in terms of costs per school, per pupil or per teacher. Indeed, in dealing with expenditure on the scale attempted in this review, such methods would be entirely misleading and therefore no such figures are offered. Further, it is not practicable to bring within the scope of this financial survey the educational considerations underlying changes in the numbers and types of schools, pupils and teachers. Nevertheless, the statistics in Table 18 may assist in keeping the purely financial data in true perspective.

TABLE 18

NUMBER OF SCHOOLS, PUPILS AND TEACHERS

	1921	1923	1925	1927	1929	1931	1932
Schools							
Primary [1]	2,907	2,901	2,894	2,903	2,915	2,924	2,924
Secondary	252	249	249	251	252	251	251
Special [2]	50	49	49	51	54	53	55
Totals	3,209	3,199	3,192	3,205	3,221	3,228	3,230
Pupils							
Average Enrolment							
In Primary Schools:							
(*a*) Below Advanced Division	706,553	676,271	582,056	586,572	582,590	587,223	589,128
(*b*) In Advanced Division			69,970	74,060	71,609	69,676	74,607
(*c*) Side Schools [1]	1,539	1,389	1,319	1,251	1,039	891	880
In Secondary Schools:							
(*a*) Primary or Preparatory Departments	94,879	88,334	74,448	73,248	74,492	74,001	74,826
(*b*) Post-primary Departments	60,693	69,778	76,153	80,506	79,714	81,388	86,188
In Special Schools [2] or Classes							
(*a*) Separate Schools	5,357	6,272	6,489	6,953	7,396	7,653	8,151
(*b*) Special Classes	1,894	2,488	2,866	2,698	2,699	2,836	2,608
Totals	870,915	844,532	813,301	825,288	819,539	823,668	836,388
Teachers							
General Certificate (Chapter IV)	24,484	20,461	20,584	20,972	21,277	21,724	21,665
Special Certificate [3] (Chapter V)		2,691	2,987	3,343	3,574	3,789	3,877
Technical Certificate [4] (Chapter VI)		1,854	2,080	2,222	2,336	2,534	2,620
Miscellaneous		99	84	68	64	66	56
Totals	24,484	25,105	25,735	26,605	27,251	28,113	28,218
Number of University Graduates included in above totals	4,733	5,188	5,875	6,809	7,969	9,079	9,609

[1] "*Side Schools*," *i.e. very small schools in outlying districts, are attached to some of these Primary Schools. The numbers of such "Side Schools" have fallen from* 250 *in* 1921 *to* 160 *in* 1932.

[2] *Schools for blind, deaf, physically or mentally defective children. In addition to the separate schools, special classes were conducted in ordinary schools. The numbers of such special classes have increased from* 55 *in* 1921 *to* 68 *in* 1925, *but have since fallen again to* 55.

[3] *Normally the holders of this certificate are trained teachers with a good Honours Degree. Many of these teachers are also holders of the General Certificate.*

[4] *Trained teachers holding Diplomas of Technical Colleges, Schools of Art, etc.*

(i) *Notes on Table* 18

(a) *Pupils.*—During the period 1921–31 a decrease of 4 per cent. in the total number of pupils in all schools has been accompanied by an increase of 42 per cent. in the numbers of pupils in the post-primary departments

of secondary schools. Comparable figures are not available to show the increase in the number of pupils in primary schools who are following organised courses of post-qualifying work, but there is no doubt that the increase is very substantial owing to the development of advanced divisions. This great increase in the demand for secondary and higher education has more than outweighed any savings which have been possible as the result of shrinkage in the total number of pupils.

(b) *Teachers.*—Since 1921 the number of teachers employed has increased by 15 per cent., while the number of pupils has decreased by 4 per cent. These figures clearly indicate progress towards a more liberal standard of staffing. The average number of scholars per teacher in primary schools in 1922–3 was 37; the corresponding figure for 1931–2 was 34. Some part of this fall in the number of scholars per teacher may be attributed to general reduction in the size of classes in primary schools, but in a considerable measure it is due to the increased numbers of pupils following post-primary courses which require a more liberal standard of staffing—especially in connection with instruction in practical subjects. During the same period the standard of staffing in secondary schools does not show any substantial change. It is necessary, however, to bear in mind that these figures of average numbers of pupils per teacher indicate the change in *numerical* standard only. At the same time there has been a marked improvement in the proportions of teachers with higher qualifications—an improvement due in part to the demand for secondary and other forms of post-primary education and in part to development of the arrangements for the training of teachers. While the numbers of ordinary non-graduate certificated teachers in the schools has increased since 1923 by less than 6 per cent., the corresponding percentage increase in the numbers of teachers with the " special " or " technical " certificates is 39. The numbers of teachers who are university graduates register the striking increase of over 100 per cent. since 1921. The data available is not sufficient to assess separately the financial effects of these changes with any degree of accuracy, but the general financial considerations are referred to in the notes on teachers' salaries.

(ii) *Analysis of Increase of Expenditure between* 1921–2 *and* 1931–2

During this period the expenditure of education authorities increased by £1,001,000, or 9 per cent. (see Table 17). This increase may be accounted for as shown in Table 19.

The estimates for 1932–3 indicate that this increase of £1,001,000 will be lowered by £190,000, the further saving being mainly accounted for by a fall of £154,000 under the head of teachers' salaries.

(iii) *Notes on Subheads of Expenditure*

" Administration "

A number of considerations should be taken into account before passing any hasty judgment on the increase which has taken place under this head since 1913–4. Before 1919 very few school board areas were large enough to call for the services of directors of education. Moreover, a large part of the school population were in denominational schools. Each of these schools was an independent unit, and a considerable part of the now centralised administrative work was secured by voluntary service. In fact, except in the cases of a few large burghs, the organisation of education in the broader sense contemplated by the Act of 1918 did not exist. Again, in 1929–30, the work of the *ad hoc* education authorities was transferred to the county councils and the education account had, for the first time, to bear a share of the general expense of county administration. This additional expense is, of course, simply an accounting transfer of cost. But the changes in 1919 and 1929 both involved the additional expenses of compensation for loss of office which is the usual accompaniment of radical alteration in local government administration. There is, however,

TABLE 19

	£ (000)	£ (000)
Increases :		
Teachers' Salaries, etc.	378	
Employers' Contributions to Superannuation	371	
School Maintenance	55	
Loan Charges, etc.	348	
Bursaries, etc.	31	
Medical Services	56	
Miscellaneous	65	
		1,304
Off-set by Decreases :		
Administration	17	
Contributions to Voluntary Schools, etc.	29	
Meals and Clothing	217	
Reformatory and Industrial Schools	40	
		303
Net Increase		1,001

already some indication that the changes of 1929, which provided for the concentration of services under the control of the county councils, are leading to more efficient and economical administrative arrangements.

The centralisation and organisation of post-primary education and the development of the special services of conveyance, school meals, bursary assistance, medical services, etc., have greatly added to the necessary work of administration.

The figures for 1921–2 and 1931–2 in Table 17 may be analysed as follows :

TABLE 20

	1921–2	1931–2
	£	£
Salaries of Officials	279,975	251,031
Retiring Allowances, Compensation, Contributions to Superannuation Funds		12,835 12,329 20,473
Travelling and other Expenses of Members	15,994	7,534
Printing, Postages, etc.	56,862	39,062
Rent, Repairs, Fuel, etc.	37,672	22,491
Legal Expenses	4,766	2,134
Election Expenses	25,969	—
Proportion of General Town and County Expenses	—	36,069
	£421,238	£403,958

" *Teachers' Salaries* "

In the first place, it is necessary to show for the years 1921–2 and 1931–2 the contents of the sums shown under the head of teachers' salaries in Table 17.

In connection with the consideration of growth of the teachers' salary bill, reference has already been made to the need for keeping in mind the changes in the numbers and qualifications of the teachers. The effects of improved standards of staffing, both as regards numbers and qualifications of teachers, are more than sufficient to account for the increase in the salary bill. The net increase shown in Table 21 has been diminished in 1932–3

TABLE 21

	1921–2	1931–2
	£	£
Day School Salaries	7,020,413	7,445,686
Payments for Continuation Class Work	299,210	253,639
Retiring Allowances [1]	49,601	48,133
	£7,369,224	£7,747,458
Net increase	£378,234	

[1] *Allowances granted in special cases by the authorities. These payments have no connection with the pensions paid under the State scheme.*

by £154,000, and is likely to be further diminished in 1933-4. Thus while the present salary bill still shows an increase on the figures for 1921–2, there has been during the last twelve years a considerable reduction in the rates of salary. The average payments per teacher in respect of day school salary ascertained by dividing the salary bill (day schools) by the number of teachers recognised for grant purposes, in successive years since 1921–2, have been £287, £275, £276, £282, £285, £283, £285, £288, £290, £296 and £271. The corresponding numbers of teachers have been 24,430, 24,699, 24,503, 24,542, 24,958, 25,497, 25,752, 26,105, 26,475, 26,965, and 27,452. These "average" salaries are, however, of very little value in examining the year-to-year tendencies of expenditure or rates of salary. Small variations in the rates of salary may be completely counteracted by the changes in the numbers of teachers and the consequential effects of annual increments. Only the most striking changes are revealed, viz. the reductions of average salaries due to the lowering of salary rates following the two great economy measures in 1922 and 1931. But it would be wholly misleading to measure the lowering of the salary rates by the reductions in the averages. Such a process would ignore the many factors which influence the salary bill—factors whose effects could only be ascertained by a most exhaustive statistical investigation.

The reductions in the Minimum National Scales and the corresponding effects on the approved salary scales of education authorities have been referred to in Chapter Two of this section.

"*School Maintenance*"

The items included under this subhead are shown in the following analysis:

TABLE 22

	1921–2	1931–2	INCREASE (+) DECREASE (−)
	£	£	£
Books, Apparatus (net)	282,898	270,472	(−) 12,426
Rent, Rates, Taxes, Insurance (net)	309,155	379,295	(+) 70,140
Replacements and Repairs	491,666	423,694	(−) 67,972
Fuel, Light and Cleaning	695,156	748,830	(+) 53,674
Miscellaneous	40,279	51,790	(+) 11,511
Total	1,819,154	1,874,081	(+) 54,927

Roughly 97 per cent. of expenditure under this head is in respect of day schools, the balance of 3 per cent. being attributable to continuation classes.

While expenditure on school maintenance has remained relatively stable during the last twelve years, the increase between 1913–4 and 1921–2 amounted to 159 per cent. In view of the rise in the level of prices and wages owing to the war, this increase appears to be modest, especially in view of the additional burdens of repairs, rent, etc., which the transfer of the denominational schools imposed upon the education authorities. On the other hand, it might have been expected that the steady fall in prices and wages would have been reflected in the costs of school maintenance. This fall is apparent in the items of books, apparatus, replacements and repairs, but it has been more than counteracted by the increases under other heads. The increase under the heading of rent, rates, etc., must be accepted, as the cost of these items cannot be seriously influenced by the policy of the authorities. The reasons for the increase in the expense of heating, lighting and cleaning may be attributed to the higher standards of school provision and the developments of post-primary and secondary education.

" Loan Charges and Capital Expenditure met by Contributions from Revenue "

Although there is an increasing tendency for some authorities to meet part of their expenditure on capital works by direct contributions from revenue, the normal method of financing capital works is from loans, the repayments of which, with interest, are spread over a period of years. It is therefore necessary to consider what has been called the " bricks and mortar " expenditure of education authorities from three different points of view, viz. the actual expenditure on building and sites, the annual charges in respect of this expenditure as they fall to be met from current revenue, and the total indebtedness of the authorities in respect of outstanding loan liabilities. The relative figures over a series of years are shown in Table 23 on page 236.

While there is no part of educational expenditure which provokes local criticism of extravagance more readily than the building of new schools, it is interesting to note how relatively small is the annual charge for capital expenditure when viewed in comparison with the total expenditure of education authorities. In 1913–4 the annual charges reached the comparatively high figure of 13 per cent. of total expenditure. In 1921–2, although the authorities were commencing to overtake the building programmes which had been delayed by the war, the percentage fell so low as 5. Even in the year 1930–1, when the expenditure on capital works reached the highest figure on record, viz. £1,387,000, the annual charges amounted to £829,000, or less than 7 per cent. of the total expenditure on education.

Building of new schools practically ceased during the latter war years, leaving a considerable burden of arrears to be faced by the education authorities who assumed office in 1919–20. This burden was further increased by the transfer of voluntary schools, many of which were in urgent need of replacement. Moreover, high building costs, the development of housing schemes and the migrations of population, which have been a feature of post-war resettlement, added to the problems of providing new school accommodation. Immediately after the war it was only natural that the demands for housing schemes took precedence over all but the most urgent cases of new school provision. By 1921–2 the authorities had reviewed their school building programmes and were commencing in earnest to overtake the arrears of the war years when the economy measures following the Geddes Report led to an embargo upon all but the most pressing cases of new school buildings.

Bearing in mind the excessive cost of building during the first half of the period from 1921–31, the figures in Table 16 indicate that the actual amount of capital work overtaken annually amounted to no more than a fraction of the work overtaken in the years immediately before the war. Indeed, it was not until 1929—and then mainly owing to the stimulus of proposals for the raising of the school age and the organisation of post-primary education

TABLE 23

CAPITAL EXPENDITURE (EDUCATION AUTHORITIES)

YEAR ENDED MAY 15TH	EXPENDITURE FOR CAPITAL PURPOSES			ANNUAL CHARGE ON CURRENT REVENUE IN RESPECT OF EXPENDITURE FOR CAPITAL PURPOSES				TOTAL OUTSTANDING LOAN LIABILITIES AT END OF EACH YEAR
	PURCHASE OF SITES, ERECTION OF BUILDINGS, ETC.	FOR BUILDINGS OF VOLUNTARY SCHOOLS TRANSFERRED	TOTAL EXPENDITURE	INTEREST ON LOANS	REPAYMENT OF LOANS[1]	MET DIRECTLY FROM REVENUE	TOTAL ANNUAL CHARGE	
	£ (000)	£ (000)	£ (100)	£ (000)	£ (000)	£ (000)	£ (000)	£ (000)
1914	472	—	472	233	324	—	557	6,775
1922	367	131	498	221	313	69	603	5,628
1923	311	44	355	238	330	75	643	5,481
1924	327	4	331	230	327	58	615	5,285
1925	427	—	427	222	329	76	627	5,254
1926	621	—	621	227	329	119	675	5,514
1927	578	—	578	242	342	105	689	5,692
1928	654	—	654	260	351	106	717	6,157
1929	730	126	856	278	368	92	738	6,343
1930	1,071	15	1,086	294	379	87	760	6,632
1931	1,387	350	1,737	363	387	79	829	7,810
1932	1,271	—	1,271	380	438	132	950	8,731

[1] *Includes payments to sinking funds.*

—that the output of capital work can be said to have reached the normal pre-war standard. Since 1929 the output has exceeded the pre-war standard. As a result of the steadily increasing building activity during the latter part of the period under review, the total amount of outstanding loan liabilities took an upward turn and in 1930–1 exceeded for the first time the figures of 1913–4. It may be remarked, however, that while the outstanding loan liabilities amounted in 1913–4 to roughly one-and-a-half times the total annual revenue of authorities, they stand to-day in the much more satisfactory ratio of three-quarters of the total annual revenue.

The figures for the years 1922–4 in the third column of Table 23 show only a part of the initial expenditure on the purchase of voluntary schools which was imposed on the education authorities under section 18 of the Act of 1918. Upwards of £100,000 had already been spent in 1919–20 and 1920–1, while the figures for 1929–31 show that a heavy additional charge was imposed by a late decision of the Roman Catholic Church authorities —mainly in the Glasgow area—to sell rather than to lease their buildings to the education authorities.

"*Assistance to Pupils and Students* (*Bursaries, etc.*)"

This subhead includes all the forms of assistance (travelling expenses, fees, hostel residence, bursaries or maintenance allowances, etc.) which authorities are empowered to grant under section 4 of the Act of 1918, for the purpose of facilitating attendance of qualified pupils or students at intermediate or secondary schools, central institutions, training colleges or other approved institutions.

The pre-war and post-war figures shown in Table 23 are not strictly comparable. In 1913–4 students in training as teachers were normally

assisted by the training-college authorities, and the expense of such assistance does not therefore appear in the accounts of the school boards and secondary education committees. Moreover, the assistance now given by education authorities to students attending universities and central institutions is mainly a development due to the Act of 1918. If allowance is made for these considerations, the percentage increase between 1913–4 and 1931–2 falls from 267 to 100.

In the years following 1921 there was a steady tendency towards increase in this subhead of expenditure, but, as a result of the economy measures of 1931, a downward turn towards the level of expenditure in 1923 is now apparent. Details for the years 1921–2 and 1931–2 are shown in the following table:

TABLE 24

	1921–2	1931–2
Assistance to—	£	£
School Pupils:		
In 1st to 3rd Years of Post-qualifying Courses	64,516	64,611
Beyond 3rd Year of Post-qualifying Courses	49,234	48,315
Students at:		
Universities	97,419	64,635
Training Colleges		34,279
Central Institutions		28,265
Other Approved Institutions		2,173
Totals	211,169	242,278

The above figures are exclusive of expenditure of upwards of £10,000 a year on bursaries from endowment funds which fall within the purview of the education authorities.

"*Contributions to Voluntary Schools, etc.*"

The present arrangements for contributions by education authorities towards the maintenance of voluntary schools and institutions have developed since the Act of 1918 came into force, and no comparable figures of expenditure for the year 1913–4 are available. The fall in expenditure since 1921–2 under this head is mainly due to reduction in the amounts required from the authorities by the National Committee for the Training of Teachers. Details of the contributions for the years 1921–2 and 1931–2 are as follows:

TABLE 25

	1921–2	1931–2
	£	£
Section 9 of the Act of 1918:		
(1) To Voluntary Schools, Central Institutions, etc.	68,803	66,543
(2) To Secondary Schools (Statutory Payments in Continuation of Assistance formerly granted by Secondary Education Committees)	13,526	10,231
(3) To the National Committee for the Training of Teachers	110,197	76,155
(4) To other Educational Institutions	3,774	12,940
Totals	£196,300	£165,869

Of the sum of £66,543 shown under (1) above, about two-thirds was in respect of contributions to schools under voluntary management which were scheduled as contributing to the educational provision of the area. The whole amount of these contributions (approximately £45,000) was returned to the authorities in the form of grants from the Education (Scotland) Fund.

"*Medical Examination and Treatment*"

While the service of medical *inspection* was firmly established by 1913–14, the medical *treatment* of school children was then only in its initial stages. The following figures indicate clearly that the development of medical *treatment* service is responsible for the greater part of the additional expenditure on the school medical services since 1913–4.

TABLE 26

	1913–4	1921–2	1931–2
	£	£	£
Medical Inspection . .	40,955	60,628	70,056
Medical Treatment . .	9,365	60,642	107,337
Totals . . .	£50,320	£121,270	£177,393

"*Meals and Clothing of Necessitous Children*"

Not only does this item show an abnormal percentage increase on the standard of pre-war expenditure, but it has also been subject to considerable fluctuations since 1921–2. As the greater part of this expenditure falls upon a few industrial areas, the requirements of this service in years of exceptional industrial depression and unemployment lead to serious additions to rate-burdens in these areas.

Before the war the powers of education authorities to provide food and clothing had been exercised mainly to deal with cases of neglected children. But as a result of war and post-war conditions there was a tendency for authorities to interpret very broadly their powers in this direction. Accordingly, under the exceptional conditions of industrial depression and dispute in 1921–2, the expenditure of education authorities on this service rose to the high figure of £358,000. As a result of the legal opinion of the Law Officers of the Crown for Scotland, it was decided that the duty of an education authority to provide meals and clothing did not extend to children whose parents were receiving public assistance. The effect of this decision was to re-transfer to the parish councils a burden which had gradually been passed to the education authorities. This re-transfer, together with a return to more normal industrial conditions, caused the expenditure of education authorities to fall from £358,000 in 1921–2 to £83,000 and 1922–3 and again to £50,000 in the following year. Since 1923–4 the expenditure has steadily risen as the conditions of unemployment in recent years have imposed further obligations on the authorities.

TABLE 27

	1913–4	1921–2	1931–2
Expenditure on Meals and Clothing:	£	£	£
Apparatus, Service, etc. . .	530	67,536	36,524
Provision of Meals and Clothing	6,496	290,765	104,441
Totals . . .	£7,026	£358,301	£140,965

" Reformatory and Industrial Schools "

This item mainly represents the contributions of education authorities towards the education and maintenance of children from their areas who are committed to reformatory and industrial schools under voluntary management. It also includes the *net* costs of schools under the management of the Glasgow education authority. A considerable number of schools have been closed since 1921–2 and during the last twelve years there has been a steady decline in the numbers of children committed to the schools. This decline is reflected in the gradual decrease in the contributions of education authorities.

" Miscellaneous Items "

Owing to differences in the pre-war financial and accounting arrangements, the aggregated figures under this subhead are of little use for purposes of general comparison. In the following summary the more important items have been isolated for direct comparison.

TABLE 28

	1913–4	1921–2	1931–2
	£	£	£
Conveyance and Maintenance of Blind, Deaf-mute and Defective children . . .	19,153	67,072	110,338
Rural Libraries . . .	—	12,383	53,604
Junior Instruction Centres (Ministry of Labour) . .	—	3,771	35,254
Technical Education of the Blind (Act of 1920) . . .	—	312	12,694
Interest on Bank Overdraft, etc. .	22,049	61,621	18,019
Miscellaneous . . .	30,478	40,385	21,616
Totals . . .	71,680	185,544	251,525

The services in connection with physically and mentally defective children have greatly developed in recent years. Provision for rural libraries was a special feature of the Education (Scotland) Act, 1918, and the service has rapidly expanded, largely owing to the assistance given by the Carnegie United Kingdom Trust. Expenditure on Junior Instruction Centres for unemployed adolescents has risen sharply during recent years (from £9,905 in 1929–30 to £35,254 in 1931–2). The greater part of this expenditure has been met by the Ministry of Labour. The increase of expenditure on the Technical Education of the Blind has been occasioned by the duties laid upon education authorities under the Blind Persons Act, 1920.

[*Contributed.*]

CHAPTER FIVE

FINANCE: NORTHERN IRELAND

THE income available for education in 1933–4 is estimated as follows:

	£	£
(1) *Parliamentary Grants:*		
(*a*) Salaries and expenses of Ministry of Education	65,640	
(*b*) Elementary education, including training colleges, salaries, building grants, etc.	1,404,935	
(*c*) Secondary education	160,750	
(*d*) Technical instruction	70,560	
(*e*) Queen's University	40,000	
(*f*) Teachers' superannuation	80,000	
(*g*) Grants in aid of Local Education Authorities	176,000	
(*h*) Juvenile instruction centres	1,155	
	1,999,040	
Deduct appropriations in aid	2,660	
Total from Ministry's grants		1,996,380
(2) *Rates* from Local Education Authorities[1]	94,000	
Derating grants	56,000	
Other receipts of L.E.A.'s (fees, etc.) (*not* from public funds)	29,000	
		179,000[2]
(3) *General:*		
Endowments, pupils' fees, etc.		250,000[2]
		£2,425,380

1. General

Each education authority submits annually to the Ministry a financial scheme showing its estimated expenditure and receipts, and this scheme may be approved by the Ministry with or without modification. When conveying its approval to the authority the Ministry states the amount of its contribution towards the approved expenditure. Up to the present date this proportion has been two-thirds of the authority's net approved expenditure after deduction of direct Parliamentary grants, fees and other receipts (exclusive of rates) up to a maximum limit equivalent to the produce of a rate of 8*d.* in the pound. As the expenditure of the authority must not exceed the amounts set forth in the approved financial scheme, the Ministry is always in a position to exercise an effective degree of control. All education authorities are now in receipt of the maximum grant from the Ministry, the gross estimates of the financial schemes being everywhere equal to the produce of a shilling rate on the valuations of the areas.

[1] Including rate of one farthing in the £ contributed by County and County Borough Councils to the University under the Act of 1908.

[2] These figures are approximate.

In considering the expenditure of the authorities it is to be borne in mind that not only is two-thirds of the net expenditure up to the prescribed limit refunded by the Government, but in addition a large percentage of expenditure that would normally fall upon the rates is reimbursed to the authorities in the form of " derating grants," i.e. grants from the Ministry of Home Affairs to make up the loss that would otherwise, owing to the operation of recent legislation under the Derating Acts, fall upon the rate-payers whose holdings were neither agricultural nor industrial in character.

In 1930–1 and subsequent years about 38 per cent. of the rate-borne expenditure was, or will be, refunded to the authorities in the form of " derating grants." These grants are not, however, properly grants in aid of education, but must rather be considered as grants in relief of rate-payers whose burdens Parliament has decided to remit in whole or in part.

Apart from funds voted by Parliament and local rates it is estimated that a sum of about £250,000 is received towards the cost of education in the form of fees from pupils of secondary and technical schools, endowments, and local subscriptions and sundry other small receipts. In addition, there are other amounts raised locally for the upkeep of voluntary elementary schools which it is not possible to determine with any accuracy from any published source.

2. Elementary Education

(*a*) Parliamentary Grants

(i) *Salaries.*—The Ministry of Education bears the entire cost of the salaries of public elementary-school teachers, the amounts of which are uniform for all classes of schools and fixed by the Ministry's regulations for the whole area of Northern Ireland. The number of recognised teachers in any school depends on the average attendance of pupils and is determined in accordance with a scale published in the Ministry's rules. Schools of less than 35 pupils are entitled to a single teacher only, those from 35 to 50 pupils may have a junior assistant mistress also, i.e. a teacher whose qualifications are determined by passing an examination test and satisfying the inspector, after a six-months' period of probation, of her ability to deal satisfactorily with junior pupils. Schools with 50 pupils are entitled to a trained assistant in lieu of a junior mistress ; those with 95 pupils have two trained assistants, and an extra assistant is brought in for every additional 45 pupils. In large senior schools a slightly more liberal staffing is allowed.

The normal salary scales before April 1st, 1931 were : for trained men, £160, rising by increments of £11 to £344 ; for trained women, £145, with £9 increments, to £280. Teachers rated as " highly efficient " are awarded additional increments within the normal scales at intervals of not less than three years. About one-third of the teachers are rated as " highly efficient."

In addition to the normal salary scale, there is a supplementary or supernormal scale, granted only to " highly efficient " teachers who have reached the maximum of the normal scale. There are five increments in this scale, which varied in accordance with the size of the school from £5 to £17 in the case of men and from £3 to £11 in the case of women. The highest scale salary paid to any teacher was £429, paid to the principal of a school exceeding 240 in average attendance. Teachers possessing special qualifications, such as university degrees, receive annual bonuses. A B.A. received £20 extra if a man, £16 if a woman.

All principals of schools of over 30 pupils received a capitation payment of 9*s.* per pupil for the first 120 pupils, and 4*s.* 6*d.* for remaining pupils up to 600. Apart from some differences in supernormal scale salary, capitation payments are the only additional payments made to principals as compared with assistants.

Junior mistresses had a scale £100—£5—£140.

In a few convent and monastery schools the religious persons teaching are paid by a capitation rate in lieu of the ordinary salaries.

Grants are also paid to teachers for teaching certain special and extra subjects, e.g. cookery, laundrywork, horticulture and mathematics.

All the rates mentioned are, since April 1st, 1931, subject to a reduction of 7½ per cent.

The average total salaries on October 1st, 1931, were :

	£	s.	d.
Men (Principals and Assistants)	331	0	6
Women (Principals and Assistants)	231	7	6
Junior Assistant Mistresses	120	11	5

(ii) *Training.*—The cost of training elementary-school teachers is defrayed from the Parliamentary vote, supplemented by a fee of £30 annually paid by each student. A sum of £70 for each man student and £62 10s. for each woman student is paid to the training colleges. Stranmillis Training College has been provided wholly from State sources ; St. Mary's College for Roman Catholic female students receives a special annual grant of £1,000 (terminable in 1935) towards its initial capital expenditure under an arrangement made by the former Commissioners of National Education in 1910. Roman Catholic men students are trained in England at Strawberry Hill, near Twickenham, Middlesex, and the Ministry defrays the cost of training through the Board of Education at rates per student identical with those paid in England.

(iii) *Building Grants.*—Grants are payable from the Parliamentary vote under Section 10 of the Education Act, 1930, towards the cost of providing new voluntary schools and of enlarging and reconstructing existing voluntary schools. In 1932–3, £23,200 was expended in grants for this purpose, and the estimates for 1933–34 contain a sum of £39,000 ; these sums represent 50 per cent. of the cost of the buildings, the remainder being contributed by the voluntary school managers.

(*b*) Expenditure borne by Education Authorities

The following are the main heads of the expenditure that falls to be borne out of the funds of the local education authorities (supplemented by the Ministry's grants-in-aid).

(i) The cost of erecting and equipping all provided schools. This work is usually financed by long-term loans raised by the Councils of the counties and county boroughs.

(ii) Contributions may be made under certain statutory conditions towards the cost of providing, enlarging, and equipping voluntary schools. This procedure is sparingly adopted, since provision was made for direct building grants to voluntary schools under the Act of 1930.

(iii) The whole cost of maintaining provided and transferred schools, and half the cost of maintenance in the case of certain voluntary schools where such schools are put under the management of a statutory committee on which the authority is represented (there are about eighty-one schools of this kind).

(iv) All voluntary schools are entitled to receive from the education authority one-half of the cost of heating, lighting and cleaning. The authority must be satisfied that the school will remain in operation for not less than two years and that the amounts expended are reasonable.

(v) The cost of administering the law of compulsory school attendance and salaries of school attendance officers.

(vi) Cost of medical (including dental) inspection and treatment of school children and of supplying food and clothing for children whose parents are too poor to do so.

(vii) Cost of conveyance of children to school from outlying districts (where necessary).

(viii) Cost of providing free books and stationery for pupils in cases where the authority decides to do so.

(ix) Provision of free meals for school children in cases where the parents are too poor to pay.

(x) Cost of making adequate provision for the care (including maintenance if necessary) and education of afflicted children.

The funds distributed by the local education authorities for these purposes in the year ended March 31st, 1932, were derived from the following sources :

	£
(*a*) From Ministry of Education :	
(i) Attendance, Incremental and Other Direct Grants	70,665
(ii) Grant-in-aid (Education Act, [N.I], 1923, Sect. 76)	168,986
Total from Ministry of Education	239,651
(*b*) From Ministry of Home Affairs : Derating grants	56,562
(*c*) Students' Fees, Parents' Contributions, etc.	28,870
(*d*) Local Rates	93,858[1]
Total	£418,941

The *distribution* of these funds between the different heads of expenditure in the same year was as follows :

(*a*) Administration	36,819
(*b*) Elementary Education	108,079
(*c*) Secondary Education	27,601
(*d*) Technical Instruction	173,824
(*e*) University Scholarships	3,608
(*f*) Health and Well-being of Scholars	26,245
(*g*) Care of Afflicted Children	5,198
(*h*) Miscellaneous (Loan Charges, etc.)	37,567
	£418,941

3. Preparatory, Intermediate and Secondary Education

(*a*) Parliamentary Grants

(i) *Capitation Grant.*—The Ministry pays to the governing body of each recognised preparatory, intermediate or secondary school an annual capitation grant based on the number of pupils on the rolls who have made at least 130 attendances in the school year. For a pupil in the preparatory stage, i.e. between 6 and 12 years of age, £5 is paid ; intermediate pupils (13 to 16 years of age), £9 ; and for senior pupils, i.e. those taking a two-years' course subsequently to passing the Junior Certificate Examination, the rate of grant is £12 per pupil.

(ii) *Incremental Grant.*—There is a fixed scale of minimum salaries for all recognised teachers, consisting of two portions, an initial or basic salary, and an incremental portion. The former falls wholly upon the governing body to meet, but the Ministry contributes the whole of the latter or incremental portion. In any school where a higher scale than the minimum is adopted, the excess over the latter sale is borne entirely by the school funds.

The choice of teachers, subject to satisfactory qualifications, being left in the hands of the governing bodies, the arrangement whereby all the portion of the salary payable in excess of the basic portion is defrayed by the Ministry gives great freedom to the smaller schools in the selection of teachers with long experience.

(iii) *Exhibitions and Prizes.*—The cost of providing exhibitions and prizes and of holding the Annual Junior and Senior Certificate Examinations

[1] Equivalent to a rate of 7*d.* in the pound over the area of Northern Ireland.

falls upon the Ministry. Students pay a small examination fee which goes towards the necessary expenses of the examination.

(*b*) Expenditure borne by Local Authorities

(i) *Schools.*—The education authorities may when necessary provide and maintain secondary schools. In 1933, 5 schools were so maintained.

(ii) *Building Grants, etc.*—Education authorities have powers to contribute by making grants towards the erection, enlargement, reconstruction, and equipment of secondary schools under Boards of Governors, as well as towards general expenses. Under this head £3,200 was granted in year ended March 31st, 1933.

(iii) *Scholarships.*—All education authorities maintain scholarship schemes for enabling deserving pupils of elementary schools to attend secondary schools. There were about 730 scholarship-holders on December 31st, 1932.

4. Technical Education

(*a*) Parliamentary Grants

(i) *Attendance Grant.*—Grants are paid by the Ministry to the education authorities and committees in charge of technical schools on the basis of the number of hours' attendance made by the pupils at approved classes. A fixed sum of £42,000 (reduced to £40,000 since April 1st, 1931) is distributed annually to the technical schools under this head. As the sum is fixed, the amount paid per unit of attendance is decreasing annually according as the number of technical students rises.

(ii) *Incremental Grant.*—This is a grant paid towards the salaries of technical teachers in the same manner as for secondary-school teachers.

(iii) *Scholarships.*—The Ministry bears the cost of science, technological and research scholarships, and also of maintenance allowances for trades scholars.

(iv) *Examinations.*—Cost of conduct of examinations in courses of instruction in technical schools.

(*b*) Expenditure borne by Local Authorities

(i) *Maintenance of Technical Schools.*—The cost of maintaining the technical schools, including the teachers' salaries, is defrayed by the education authorities. This cost is, of course, lessened by the amounts received from the Ministry under the heads of (1) attendance grant, and (2) incremental grant, as well as by fees (which are very moderate in amount) received from the pupils.

5. Teachers' Superannuation

All teachers pay an annual contribution of 4 per cent. of their emoluments towards the cost of superannuation. In the case of secondary- and technical-school teachers this amount is supplemented by 2½ per cent. from the employing bodies, whether education authorities or Boards of Governors. but no such contribution is made by the managers of elementary schools, Pensions are paid out of the yield of the investments of the Pensions Fund and the teachers' contributions, and any further sums required to meet the cost of the annual payments to the pensioners are voted by Parliament. The deficiency met from the Parliamentary vote is rising steadily: in 1932–3 £63,000 was voted for this purpose, and in 1933–4 the estimate had increased to £80,000. The pension allowances are based on a calculation of one-eightieth of retiring salary for each year of service, but no lump sum is payable, as in Great Britain. Pensioners on March 31st, 1933, numbered 1,342 and the annual allowances totalled £169,999.

[*Contributed.*]

SECTION V

Law of Education in the United Kingdom

CHAPTER ONE

England and Wales

THE law relating to education falls broadly under two heads :

(1) that relating to the general public administration of education mostly contained in the Education Act, 1921 ; and

(2) that relating to the control of educational endowments (including endowed schools) originally a function of the Court of Chancery, then of the Charity Commissioners under the Charitable Trusts and Endowed Schools Acts, and now of the Board of Education under those Acts and the Board of Education Act, 1899, and the Orders in Council made thereunder.

I. THE GENERAL PUBLIC ADMINISTRATION OF EDUCATION

It is impossible in the space available to give an intelligible summary of the Education Act. It is proposed after a statement of the Act (as modified) and Statutory Orders thereunder to confine the notes on that Act to matters which have come before the Courts, but an attempt is made to summarise the Education Institution (Children) Act and the Teachers Superannuation Acts. The unavoidable result is to make it appear that elementary education is substantially the only form of education in which this side of the law is interested.

The main statutes affecting general administration are :

Board of Education Act, 1899.

Education (A.P.) Act, 1907, sec. 16 (Provision for Teachers Registration Council).

Education Act, 1921.—This Act has been altered as follows : sec. 3 (1) amended by the Education (Local Authorities) Act, 1931 ; sec. 19 amended by the Education (Necessity of Schools) Act, 1933 ; sec. 45 amended by Schedule III of the Children and Young Persons Act, 1933, and secs. 89–92 and 100–106 repealed and replaced by provisions in that Act (see secs. 18–24 and sec. 98 thereof) ; secs. 52 (2) (*b*) (*c*) and (4), 56 (4) and 59 and 60 repealed, and sec. 128 made applicable to Special Schools, by the Education (Institution Children) Act, 1923 ; sec. 70 (1) amended by Local Government Act, 1929, Schedule XII (6), sec. 122 (2) by Schedule X (15) and sec. 132 (2) repealed by Schedule XII ; sec. 107 modified by the Unemployment Insurance Act, 1923, sec. 6 (1) ; sec. 118 explained and modified by the Economic (Miscellaneous Provisions) Act, 1926, sec. 12, and by the National Economy (Education) Order in Council, 1931, made under the National Economy Act, 1931.

The provisions as to Continuation Schools (secs. 75–9 and 93) are in actual operation only in Rugby, although in some other areas they are nominally in force.

Education (Institution Children) Act, 1923 (modified by Local Government Act, 1929, Schedule X (18)).

Teachers Superannuation Acts, 1925 and 1933 : Teachers in Poor Law schools were brought under these Acts by the Local Government Act, 1929, sec. 124 (5) and Schedule X (19).

The main statutory regulations in force are :

(*a*) *Under the Board of Education Act*, 1899.—The Board of Education Consultative Committee) Order in Council, 1920.

(*b*) *Under the Education (Administrative Provisions) Act*, 1907.—Teachers Registration Council Order, 1926.

(*c*) *Under the Education Act.*—(1) Under sec. 80 : Order as to Medical Inspection of Schools and Educational Institutions, 1920 ; under sec. 101 (now repealed and re-enacted in Children and Young Persons Act, 1933, sec. 22) : Employment of Children in Entertainment Rules, 1920 ; under sec. 118 : Regulations for Schools of Nautical Training, 1913 ; Regulations for Scholarships and other Awards in Art, 1919–1920 ; Regulations for Special Services, 1925 (and Amending Regulations, 1931 and 1932) ; Education Code, 1926 ; Science Award Regulations, 1926 ; Regulations for further Education, 1926 ; Intermediate Education (Central Welsh Board) Regulations, 1927 ; Local Education Authorities (Choice of Employment Grant) Regulations, 1928 (Regulations of the Minister of Labour, to whom the powers of the Board under sec. 107 were transferred by Order in Council in 1927) ; State Scholarship Regulations, 1930 ; Welsh Intermediate Education Act Grant Regulations, 1930 ; Teachers Superannuation Grant Regulations, 1932 ; Adult Education Regulations, 1932 ; Elementary Education Grant Regulations, 1932 (and Amending Regulations, 1933) ; Higher Education Grant Regulations, 1933 ; Regulations for the Training of Teachers, 1933 (and Amending Regulations, 1933) ; Regulations for Secondary Schools, 1933 ; (4) under sec. 126 : Regulations as to the Expense of Education Meetings, etc., 1920 ; (5) under Schedule V, Compulsory Purchase Regulations, 1926.

(*d*) *Under the Teachers Superannuation Acts.*—(i) Superannuation Rules, 1926 (and Amending Rules, 1930) ; Teachers Superannuation (Employers Contribution) Order, 1928 ; Regulations (Treasury) as to Form of Account, 1928.

(ii) Schemes—(1) Extending the Act with modifications :

(*a*) Under sec. 21 (1) (*a*) to non-grant-aided schools, 1926.

(*b*) Under sec. 21 (1) (*b*) to Teachers employed by the Air Council, 1930, and Juvenile Unemployment Centres aided by the Ministry of Labour, and Home Training Centres aided by the Colonial Office, 1931.

(2) Providing for reciprocal arrangements with other parts of the Empire under sec. 21 (1) (*c*)—Isle of Man, 1928, Guernsey, 1928, Jersey, 1929, and Northern Ireland, 1929 and 1931, Crown Colonies, etc., 1933 (Colonial Reciprocity Scheme).

(*c*) *Under National Economy Act*, 1931.—National Economy (Education) Order, 1931.

The Central Authority

The Board of Education are the central authority and have the power of deciding certain matters judicially. In these there is no appeal to the Court from their decision but, if the Court is satisfied that the Board have not acted judicially, there is a remedy by mandamus and certiorari (Board of Education *v.* Rice, [1911] A.C. 179). The Board are bound to act judicially, but not necessarily to follow the procedure of the Courts (Local Government Board *v.* Arlidge, [1915] A.C. 120).

Education Act, 1921, sec. 162, provides that after three months any Order of the Board shall be presumed to have been duly made and within the powers of the Act. Held in R. *v.* Sankey (3 Q.B.D. 379) not to cover an Order which created a criminal offence, but in *ex parte* Ringer (7 L.G.R. 1041) and Reddaway *v.* Lancs. County Council (41 T.L.R. 422) a similar provision in another Act was held to prevent the Court considering the jurisdiction to make the Order.

Although the Board of Education are the central authority, other Government Departments are concerned with certain forms of education. No special reference is made in these notes to the law affecting these branches of education other than the law relating to the employment of children and to approved schools, which is a matter for the Home Office.

For practical purposes, the Board's control of education is mainly derived from their powers and duties to make regulations under sec. 118 with regard to the payment of grants.

Local Education Authorities

Local Education Authorities are—for the purposes of Elementary Education—councils of (*a*) County Boroughs; (*b*) Boroughs with a population of more than 10,000 according to the 1901 Census; (*c*) urban districts with a population of more than 20,000 according to that Census; and (*d*) counties; for the purposes of Higher Education, the Councils of Counties and County Boroughs. If, however, a Borough or Urban District with a population of less than 10,000 or 20,000 in 1901 is enlarged and the population of the enlarged area was more than 10,000 or 20,000 in 1901 the Council does not thereby become a Local Education Authority (Education (Local Authorities) Act, 1931).

There is no statutory definition of elementary education (R. *v.* Cockerton, [1901] 1 Q.B. at p. 340), and higher education is defined as education other than elementary education (Education Act, 1921, sec. 170 (3)).

Every Authority must have an Education Committee to which it may delegate its powers (Education Act, 1921, sec. 4 (2) (*b*))—delegation does not debar the delegating body from acting itself (Huth *v.* Clarke, 25 Q.B.D. 391). The Education Committee may also delegate to a sub-committee (Young *v.* Cuthbert, [1906] 1 Ch. 451; Richardson *v.* Abertillery Urban District Council, 44 T.L.R. 333). Secs. 11–16 of the Education Act, 1921, contain provisions enabling Authorities to submit schemes to the Board which, when approved, become binding. Held in R. *v.* East Ham Borough Council (99 L.J. 497) that the intention of the parties, and not the magnitude of proposals submitted to the Board, determines the question whether they constitute a scheme.

Elementary Schools

The main duty of the Elementary Authority is to maintain and keep efficient all necessary public elementary schools within its area and to provide such additional school accommodation as in the opinion of the Board is necessary. Fees may not be charged in a public elementary school.

These schools are either provided by the Authority or non-provided. The conditions of maintenance of the latter are contained in the Education Act, 1921, sec. 29. In non-provided schools the managers must provide the School House (which by definition includes the playground), except the teacher's house, free of charge, keep it in repair, and make such alterations and improvements in the buildings as may reasonably be required by the Authority (subject to the obligation on the Authority to make good fair wear and tear in the use of any room for the purpose of a public elementary school); they must carry out the directions of the Authority as to the secular instruction to be given, and for the dismissal of a teacher on educational grounds (in default the Authority may themselves carry out the directions as if they were the managers); they must allow inspection by the Authority. The managers have all powers of management required for carrying out the Act and the actual appointment and dismissal of teachers, but the Authority's consent is required to appointment (only to be withheld on educational grounds) and to dismissal except on grounds connected with the giving of religious instruction. If these conditions are observed, the Authority must maintain and keep the school efficient so long as it is necessary.

In case of dispute a school with not less than thirty children in average attendance can be held unnecessary only if there is reasonably accessible accommodation for them in a school of the same denominational character or, if the school is a provided school, in a provided school.

Any question arising in these matters is to be determined by the Board.

The Authority must maintain the school as it is, and they cannot (except as provided for schools of the same denominational character by the Education Act, 1921, sec. 34) direct the Managers to alter the age range (Wilford *v.* Yorks West Riding County Council, [1908] 1 K.B. 685).

The obligation to maintain and keep efficient is not limited to matters which the Authority control (A.G. v. Yorks West Riding County Council, [1907] A.C. 29—religious instruction, Gillow *v.* Durham County Council, [1913] A.C. 54—payment for care of premises), and the managers retain all powers of management not expressly conferred on the Authority by the Act (Gillow *v.* Durham County Council).

The Authority must provide an adequate supply of water (Trowbridge Water Co. *v.* Wilts County Council, [1909] 1 K.B. 824), pay for any necessary alterations and improvements (not repairs) to the playground (Lancs County Council *v.* Crowe, [1929] 1 K.B. 587), and provide the furniture for a new school (R. *v.* Easton, [1913] 2 K.B. 60). The Managers are liable for personal injury due to their negligence in failing to keep the premises in repair (Abbot *v.* Isham, 124 L.T. 734).

Teachers are in the employment of the Managers, not of the Authority (Crocker *v.* Plymouth Corporation, [1906] 1 K.B. 494).

The consent of the Authority is not a condition precedent to the dismissal of a teacher (Young *v.* Cuthbert, [1906] 1 Ch. 451), and there is no obligation on them to hear a teacher before consenting (Blanchard *v.* Dunlop, [1917] 1 Ch. 165).

It is not enough that dismissal should be alleged to be on educational grounds (Authority) or grounds connected with the giving of religious instruction (Managers); the Court has jurisdiction to decide as to the character of the grounds alleged (Smith *v.* Macnally, [1912] 1 Ch. 816; Mitchell *v.* East Sussex County Council, 109 L.T. 778; Martin *v.* Eccles Corporation, [1919] 1 Ch. 387; Hanson *v.* Radcliffe U.C., [1922] 2 Ch. 490).

A desire to economise is not an educational ground, and mixed educational and financial grounds are not sufficient (Sadler *v.* Sheffield Corporation, [1924] 1 Ch. 483).

In Young *v.* Cuthbert, Buckley J. held that a teacher dismissed by the Managers could not claim protection under sec. 29, which was merely a matter between the Authority and the Managers; Warrington J. took the opposite view in Smith *v.* McNally. There is no definite decision of the Court of Appeal on the point, but that Court has decided that, where an Authority dismiss a teacher under the provisions of the section on the Managers refusing to do so when directed, the teacher can apply to the Court (Mitchell *v.* East Sussex County Council and Hanson *v.* Radcliffe Urban District Council).

The jurisdiction of the Court is not ousted by the provision for determination by the Board if there is a question of law to decide (Gillow *v.* Durham County Council; R. *v.* Board of Education, [1910] 2 K.B. 165, and Martin *v.* Eccles Corporation; and see R. *v.* Charity Commissioners, [1897] 1 Q.B. 407). But if the question is one of fact the jurisdiction of the Court is excluded (Blencowe *v.* Northants County Council, [1907] 1 Ch. 504; West Suffolk County Council *v.* Olorenshaw, [1918] 2 K.B. 687).

With regard to provided schools—The Court will not interfere with the exercise by the Authority of its power of dismissing teachers (Education Act, 1921, sec. 148 (1)), so long as it is exercised *bona fide* (Short *v.* Poole Corporation, [1926] Ch. 66—dismissal of married women teachers—and Williams *v.* Glamorgan County Council, 32 T.L.R. 532—dismissal of teacher who refused to live near the school).

Sec. 148 provides that an Authority may appoint teachers to hold office during pleasure and may remove them. It was considered in Price *v.*

Rhondda Urban District Council, [1923] 2 Ch. 372, that a contract providing for reasonable notice was not *ultra vires*. But see Brown *v.* Dagenham Urban District Council, [1929] 1 K.B. 737, in which it was held that the Council had power, in spite of a contract providing for notice, to dismiss their clerk and assistant overseer without notice in view of the provision in the Public Health Act, 1875, sec. 189, which makes clerks " removable at pleasure," and of the Local Government Act, 1894, sec. 5 (1), which gives power to revoke the appointment of an assistant overseer.

The Act contains provisions (Section 38 and Schedule IV, Part I), enabling managers of an elementary school to transfer it to the Authority for conduct as a provided school.

The Elementary Authority may also provide nursery schools and must secure adequate school provision for blind, deaf, defective or epileptic children—subject to certain conditions they may aid such schools whether or not they are public elementary schools.

Secs. 42–69 *and* 138 (1), *Obligation to attend School*

Normally this obligation exists until the end of the term in which a child becomes 14 (16 for blind, deaf, defective, and epileptic children). A child born July 1st, 1917, becomes 14 on June 30th, 1931 (*re* Shurey, [1918] 1 Ch. 263). By-laws may substitute 15 for 14 for all children in the area, or for children other than those in specified occupations. If the by-law age is 15, the Authority has power to grant individual exemptions to children over 14 (sec. 46 (3)).

No child can be required to attend school on any day exclusively set apart for religious observance by the religious body to which his parent belongs—Ascension Day, and apparently other Holy Days specified in 5 & 6 Edward VI, c. 3 are such days for the Church of England (Marshall *v.* Graham, [1907] 2 K.B. 112).

The following are under the Act (sec. 49) reasonable excuses available to a parent for not sending his child to school:

(*a*) Sickness or any unavoidable cause.

(*b*) No public elementary school within three miles by the nearest road (this does not apply where the Authority provides conveyance)—a cart track may be a road (Hares *v.* Curtin, [1913] 2 K.B. 328).

(*c*) Efficient instruction in some other way (see also sec. 147).

Parent is defined to include guardian and every person who is liable to maintain or has the actual custody of the child. The actual parent's liability remains though the child resides elsewhere (London School Board *v.* Jackson, 7 Q.B.D. 502), but not if the child has been adopted under the Adoption of Children Act, 1926 (see sec. 5 (1) of that Act). If the father is in prison, the mother is the parent (Woodward *v.* Oldfield, [1928] 1 K.B. 204, a decision on Education Act, 1921, sec. 54). Poor Law Guardians were held to be parents of children boarded out by them (Guardians of Gateshead Union *v.* Durham County Council, [1918] 1 Ch. 146), but not where the child had not become actually chargeable (Southwark Union *v.* London County Council, [1910] 2 K.B. 559).

The statutory excuses are not the only excuses. In London School Board *v.* Duggan, 13 Q.B.D. 176, it was held that employment might be a reasonable excuse; probably the Court would not so hold now—certainly they would not where the by-laws require attendance up to 15 and the child is between 14 and 15, because individual exemptions are a matter for the Authority (Rednall *v.* Beamish, 135 L.T. 155; Thomas *v.* Hughes, [1929] 1 K.B. 226). Fear of infection for a child may be a reasonable excuse (Symes *v.* Brown, 109 L.T. 232); the fact that he played truant is not (London County Council *v.* Hearn, 100 L.T. 438), or that he was sent to a school where it was known that admittance would be properly refused (Fox *v.* Burgess, [1922] 1 K.B. 623)—a parent would apparently be liable in such a case even if the child were actually admitted (London School Board *v.* Wood, 15 Q.B.D. 415).

In Bowen *v.* Hodgson (130 L.T. 207) it was held that a parent had a reasonable excuse when the Authority refused to readmit a child unless it was sent to a ringworm centre for examination, and in London County Council *v.* Maher, [1929] 2 K.B. 97, where the only available school for the child (deaf) was a residential one. A child may not be taken away by its parent for part of the school hours for efficient instruction elsewhere (Osborne *v.* Martin, 44 T.L.R. 38).

While a parent is not bound to submit his child to a routine medical inspection under sec. 81, there is no option as to an examination under sec. 87 (Fox *v.* Burgess).

An action will lie for assault if a child is kept in for not doing homework (Hunter *v.* Johnson, 13 Q.B.D. 225). Corporal punishment (unless excessive) may be inflicted even for misconduct on the way from school (Cleary *v.* Booth, [1893] 1 Q.B. 465, R. *v.* Newport (Salop) Justices, [1929] 2 K.B. 416), or by an assistant teacher contrary to the rules of the school—at any rate unless the rules are known to the parent (Mansell *v.* Griffin, [1908] 1 K.B. 160).

A breach of by-laws is a criminal offence, and therefore no appeal lies to the Court of Appeal on a case stated (Mellor *v.* Denham, 5 Q.B.D. 467).

Secs. 70–79, *Higher Education*

The duty of the Authority for Higher Education is to take such steps as seem to them desirable to supply or aid the supply of higher education, and to promote the general co-ordination of all forms of education.

There is not (until the provisions of the Act with regard to continuation schools have come into operation) any obligation on any person to receive higher education. The result of this absence of obligation and of the nature of the obligation of the Authority (compare " such steps as seem to them desirable " with " such additional school accommodation as is in the opinion of the Board necessary " in the case of the Elementary Authority) is that the public administration of higher education is in the happy position of having no history so far as the courts are concerned.

Secs. 80–88, *Health and Well-being of Scholars*

These sections are concerned with medical inspection and treatment, the provision of meals where desirable on educational grounds, special provisions for promoting social and physical training, the cleansing of verminous children, and the provision of conveyances and guides. They (together with the provisions as to approved schools in the Children and Young Persons Act, 1933) may be said to constitute the educational side of the special provision for the protection of children and young persons, made by the legislature mainly by the last-mentioned Act and the Factory Act.

A father though legally separated from his wife (who has the custody of the children) may be liable for neglect (Poole *v.* Stokes, 110 L.T. 1020); refusal to allow an operation for adenoids may be failure to provide adequate medical relief (Oakey *v.* Johnson, [1914] 1 K.B. 216).

Secs. 109–173, *General*

Secs. 109–114 deal with the acquisition, appropriation and alienation of land. Whether land is acquired compulsorily or by agreement, an action will not lie for breach of covenant or interference with ancient lights—the remedy is compensation (Kirby *v.* Harrogate School Board, [1896] 1 Ch. 437).

The Acquisition of Land (Assessment of Compensation) Act, 1919, provides for the assessment of compensation where land is acquired compulsorily.

The provisions (secs. 113 and 114) for appropriation of land acquired for one purpose to other purposes provide a statutory exemption from

the general law (A.G. *v.* Pontypridd Urban Council, [1906] 2 Ch. 257), under which an Authority can be restrained by injunction from so doing.

Under sec. 122 (1) (*c*) it has been held that no part of the capital expenditure on buildings erected partly for a secondary school and partly for providing cookery, etc., instruction for children from eight public elementary schools could be charged on the parishes served by these schools (Llangollen Parish Council *v.* Denbighshire County Council, [1921] 3 K.B. 313). Whether expenditure is capital expenditure or not depends on the object of the expenditure, and not on the source from which it is provided (R. *v.* Wraith, [1907] 2 K.B. 756).

Sec. 166 exempts from by-law provisions with respect to the construction of new buildings, school buildings erected according to plans approved by the Board. In Higgs & Hill, Ltd. *v.* Stepney Borough Council, [1914] 1 K.B. 505, this provision was held not to apply to by-laws requiring the licence of the council to the erection of a hoarding in front of proposed buildings; but it makes notice to the District Surveyor under the London Building Act, 1894, unnecessary (Holliday & Greenwood, Ltd. *v.* District Surveyors Association, [1914] 2 K.B. 803). It does not apply to alterations or additions (Akers *v.* Danbney, 13 L.G.R. 1201).

Schedule I, Part III, makes the disqualification for membership of the Council (except that of being a paid teacher in a school aided, provided, or maintained by the Council) apply to membership of the Education Committee.

For County and Borough Councils the provisions for disqualification are set out in the Municipal Corporations Act, 1882, sec. 12.

One disqualification is a direct or indirect share or interest in any contract with a Council provided that a person shall not be deemed to have any share or interest by reason only of his having any share or interest in a company. A person who is not only a shareholder but also managing director (paid by salary) is not disqualified (Lapish *v.* Braithwaite, [1926] A.C. 275). The interest must be pecuniary, not merely sentimental (England *v.* Inglis, [1920] 2 K.B. 636).

The similar disqualification for urban district councillors is in the Local Government Act, 1894, sec. 46.

Schedule III (3). Notice to a teacher cannot be impeached on the ground of the irregularity of the appointment of Managers (Harries *v.* Crawford, [1919] A.C. 717).

Education (Institution Children) Act, 1923

The object of this Act was to secure that, where children in Poor Law Institutions or boarded out by Guardians or in Charitable Institutions are sent to a Public Elementary or Special School, the cost of their education should fall on the Authority of the area to which they belong, and not on that of the area where the Institution is situated or they are boarded out. It meets the difficulty created by the Gateshead Union Case, [1918] 1 Ch. 146, which was felt to create a grievance as imposing an obligation on Authorities in respect of children who did not really belong to them. A child in a Charitable Institution is deemed to belong to (*a*) the area in England or Wales in which it has last resided (otherwise than in a Charitable Institution) for six months continuously; or (*b*) if this cannot be ascertained the area in England or Wales of birth; or (*c*) failing this as the Board may decide. The decision of the Board on this point, on the question as to the amount due, and whether the child is resident in a Charitable Institution, is final.

A "Poor Law" child belongs (Local Government Act, 1929, Schedule X (18)) to the area in which his place of settlement would have been situated if that Act had not been passed.

Sec. 2 of the Act makes it clear that an Authority is not bound to receive as boarders in a Special School children resident in Poor Law Institutions or boarded out by the Guardians or who belong to the area of another Authority without payment.

Children and Young Persons Act, 1933

(1) *Employment of Children and Young Persons*

The employment of children and young persons was formerly regulated by secs. 90–108 of the Education Act, 1921; secs. 90–92 and 100–106 were repealed by the Children and Young Persons Act, 1932, and their provisions (as amended by that Act) constitute Pt. II of the Children and Young Persons Act, 1933.

The employment of a child under 12 (except that by-laws may authorise employment by parents or guardians) is prohibited. No other child may be employed more than two hours on Sunday, on any schoolday before the close of school hours, or on any day before 6 a.m. or after 8 p.m. —but by-laws may authorise one hour's employment on schooldays before the school opening. A chorister taking part in a religious service or a choir practice is not to be deemed to be employed. A child may not be employed in any occupation likely to be injurious. A child may not be employed in entertainments for which a charge is made, except (in the case of a child over 12) under licence from the Local Education Authority. These provisions apply to a child attending a public elementary school until the end of the term in which he attains the age of 14. Otherwise childhood ceases on attaining that age. No person under 16 may be employed in street trading except that by-laws may allow employment of young persons under that age by parents if a young person is over 14 and under 17.

The Women, Young Persons and Children Employment Act, 1920, prohibits the employment of a child under 14 in any industrial undertaking or in any ship (unless only members of the family are employed therein).

A child is not employed in street trading if employed to call at the houses of customers of his employer to offer bread for sale (Stratford Co-operative Society *v.* East Ham Corporation [1915] 2K.B.70; and see Philpott *v.* Albright, 94L.T.540).

He is employed, though the relationship to the "employer" is that of agent to principal (Morgan *v.* Parr [1921] 2K.B.379; Sweet *v.* Williams, 128L.T.379).

An Authority, having resolved under sec. 94 of the Education Act, 1921, that they were satisfied by the report of the school medical officer that a child's employment was prejudicial to his health, are bound to produce the report in Court (Margerison *v.* Hind & Co. [1922] 1K.B.214). Sec. 97 (3) enables an employer charged with wrongful employment, after the commission of the offence has been proved, to have the person whom he claims to be the actual offender brought before the Court and exempts him from fine if he proves his innocence—held (Robinson *v.* Hill [1910] 1K.B.94) that, unless the offence is proved against him, the employer can be acquitted without the production of the other person.

A child kept at home so that the mother may earn by going out to work is not employed for gain (Mather *v.* Laurence [1899] 1Q.B.1000). An official entering premises without a Justice's Order under sec. 98 is a trespasser (Consett Urban District Council *v.* Crawford [1903] 2K.B.183).

(2) *Approved Schools*

This Act also deals with approved schools (formerly known as reformatory and industrial schools) for juvenile offenders and children and young persons who are in need of "care and protection" as defined by the Act. Normally children or young persons are committed by these schools under an order —approved school order—of the Court (usually a juvenile Court), but the Home Secretary can also send certain juvenile offenders to them.

Generally speaking, 10 is the minimum age of admission and the period of detention is limited to three years. The schools must provide for education and training and may be classified according to age, the character

of the education and training, religious persuasion, geographical position and otherwise as the Home Secretary thinks appropriate. A certificate of approval by the Home Secretary—which may be withdrawn if he is dissatisfied with the management of a school or considers it unnecessary—is required. The managers may surrender their certificate.

Schools may be provided by Local Authorities or others ; it is the duty of the authority to make good any deficiency. As regards children the Local Education Authorities for elementary education are the Authority (they remain responsible for a child sent to a school after he becomes a young person) ; for other persons the councils of counties and county boroughs are the Local Authorities.

The Teachers Superannuation Acts, 1925 and 1933

Part I of the 1925 Act provides that teachers who are not, after the commencement of the Act (April 1st, 1926), employed in contributory service shall continue subject to the Elementary School Teachers (Superannuation) Act, 1898, and the School Teachers (Superannuation) Acts, 1918–1924, as amended by Part III of the Act. (The number of existing teachers eligible for pensions under the 1898 Act is very small ; the conditions of benefit for any teachers who remain subject to the 1918–24 Acts are similar to those in Part II of the 1925 Act.)

Part II provides for allowances as follows : annual allowance one-eightieth of the average salary (i.e. salary during the last five years of service recognised, contributory or approved external unless unreasonably increased during that period) for each year of recognised or contributory service, with a maximum of half average salary and a lump sum of one-thirtieth for each year with a maximum of one and a half average salary. If the total received is less than a death gratuity would have been, it is made up to that amount.

If a teacher has ceased to serve in consequence of grave misconduct, the allowance or gratuity may be refused or granted at a reduced rate (Schedule I (10)). In Poad *v.* Scarborough Guardians, [1914] 3 K.B. 959, it was held under the Poor Law Officers (Superannuation) Act, 1896, that " grave misconduct " must be misconduct of a higher standard than would justify dismissal, and must be of a very serious character.

Recognised service is full-time service as a teacher (between the ages of 18 and 65) before April 1st, 1926, for the most part in schools grant-aided by the Board, but also including service in Approved Schools, Certified Institutions under the Mental Deficiency Act, 1913, and also (except in Elementary or Approved Schools) service in schools which, although not grant-aided at the time of service, became grant-aided before April 1st, 1924. The service of Supplementary Teachers in Elementary Schools is not pensionable. Contributory service is similar service from April 1st, 1926, and also, from April 1st, 1930, service in Poor Law Schools. In addition, not more than ten years' service in non-grant-aided schools prior to April 1st, 1919 (the date when the 1918 Act came into operation), may under certain conditions be recognised service, and service in certain schools approved under sec. 18 (vii) of the 1918 Act is recognised or contributory. Educational organisers employed by local education authorities and having the prescribed previous teaching experience are in contributory service (sec. 14). That section contains special provisions as to the treatment of organisers' service prior to April 1st, 1926. Approved external service (Scottish Educational pensionable service, certain service as a Civil Servant, University service, and such other service as may be prescribed) counts as if it were contributory towards the years qualifying for a pension, and also for calculating the average salary, but is not pensionable. Qualifying service is employment declared by the Treasury to be qualifying service for the purpose of calculating the qualifying period.

The qualification for an " age " pension is attainment of the age of 60 and (*a*) thirty years' service (of which not less than ten years are recognised, contributory, or approved external service), reducible in the case of a married woman for periods of absence during marriage to not less than twenty years ;

or (*b*) for teachers previously subject to the 1898 Act recognised or contributory service for not less than half the number of years between certification and attaining the age of 65; or (*c*) recognised contributory or approved external service for two-thirds of the period between first employment and the age of 65 (with a minimum of ten years).

A teacher who has retired before becoming 60 is eligible if he has the necessary service.

For a pension on the ground of ill health the qualification is ten years' recognised or contributory or approved external service. Where a teacher with less service breaks down, he is entitled to a short-service gratuity of one-twelfth average salary for each year of pensionable service. For these benefits a teacher must normally be in contributory or approved external service at or within six months of the date of his application.

If a teacher with five years' recognised or contributory or approved external service dies in contributory service, his legal personal representatives are entitled to a death gratuity equal to his average salary or to the lump sum which would have been payable to him if a breakdown allowance had been payable, whichever is the greater. The gratuity forms part of his estate and is applicable in payment of debts in priority to his next of kin (*re* Hawkins, [1926] Ch. 428). It is property which passes on his death so as to be subject to death duties (A.G. *v.* Quixley, 141 L.T. 288). Contributions of 5 per cent. of the teacher's salary are payable to the Board by him and his employer respectively. Grants are payable on the employer's contributions as if they were salary (sec. 9 (2) and (3) of the Act and Teachers Superannuation Grant Regulations, 1928).

A teacher whose service is discontinued may remain in the scheme by paying a 10 per cent. contribution on his previous salary for a period of one year or, if he is serving in any part of the Dominions outside the United Kingdom or in a school in a foreign country which is maintained primarily for the children of British subjects or in which the employment of British teachers is shown to the Board to be expedient, a period of four years.

The Act provides for the withdrawal of an infirmity allowance on recovery, the cessation or reduction of an annual allowance on re-employment in certain capacities, and the avoidance of duplicate pensions or gratuities.

Provision is made (sec. 12) as to the return of his contributions with compound interest to a teacher who fails to qualify for benefit or whose benefits are less than his accumulated contributions. Rules can be made by the Board with the consent of the Treasury and after consultation with representatives of the Authorities and the teachers for carrying the Act into effect (sec. 17). There is no power for the teacher or the employer to contract out of the Act (Dewhurst *v.* Salford Guardians, [1926] A.C. 619).

Part IV enables the Board, with the consent of the Treasury, to make Schemes (*a*) applying Part II of the Act with modifications to teachers employed in non-grant-aided schools (such a Scheme must be self-supporting); (*b*) applying these provisions to teachers employed by other Government Departments or in schools receiving grants from such Departments; and (*c*) giving effect to reciprocal arrangements made with Authorities administering Statutory Schemes in any other part of the Empire.

II. THE CONTROL AND ADMINISTRATION OF EDUCATIONAL FOUNDATIONS

The more important statutory provisions are:

Charitable Trusts Act, 1853.
Charitable Trusts Amendment Act, 1855.
Charitable Trusts Act, 1860.
Charitable Trusts Act, 1869.
Charitable Trusts (Recovery) Act, 1891.
Endowed Schools Act, 1869.
Endowed Schools Act, 1873.

Endowed Schools Act, 1874.
Welsh Intermediate Education Act, 1889.
Board of Education Act, 1899, sec. 2, and the Board of Education (Powers) Orders in Council, 1900, 1901, and 1902, made thereunder.
Endowed Schools Masters Act, 1908.
Education Act, 1921, secs. 41, 117, 121, and 164.

The Charitable Trusts Acts gave to the Government Department concerned (now the Board of Education so far as educational foundations are concerned) the powers of the Court of Chancery to be exercised on the same legal principles. These powers fall under two main heads: (1) the power to supervise and control the administration of charities (in some respects control was tightened by the Charitable Trusts Acts); and (2) the power, when occasion requires, to make a scheme for the application of the funds of the charity concerned *cy près* to the original trusts. The Acts imposed some restrictions on Trustees' powers (e.g. as to sales, long leases, and borrowing) and some obligations (e.g. to send accounts). Supervision and control are matters almost entirely of Charitable Trust Law, and are not affected by the Endowed Schools Acts. But the jurisdiction to make schemes conferred by the Endowed Schools Acts is far more important than that under the Charitable Trusts Acts. Most educational foundations of substantial importance (other than modern foundations) are regulated by Schemes made under the Endowed Schools Acts.

The principles on which Schemes can be made under the Charitable Trusts Acts and the Endowed Schools Acts respectively differ fundamentally (the former Acts were essentially conservative, the latter almost revolutionary).

The more important differences are as follows:

I

Under the Charitable Trusts jurisdiction the Board are bound by the principles established by the Court of Chancery, but the Endowed Schools Acts (originally temporary and made permanent by the Expiring Laws Act, 1922) conferred a special Scheme-making power to be exercised on principles (especially as to (*a*) religious education, (*b*) curriculum, (*c*) origin of jurisdiction, and (*d*) regard to existing interests), which differed fundamentally from the principles of the Court.

(*a*) It is substantially true to say that the presumption of the Courts was that Church of England religious instruction should be given in an endowed school (A.-G. *v.* Cullum, 1 Y. & C. 411); the principle of the Endowed Schools Acts is that no trusts are denominational unless the original trusts so required by express provision or by necessary implication (e.g. requirement by original trusts that a majority of the governing body should be of a particular denomination).

(*b*) As to the curriculum, it was an established principle of the Courts that Greek and Latin should be taught in Grammar Schools, and even the Grammar Schools Act, 1840, while providing for other subjects, made the teaching of Greek and Latin compulsory if funds permitted. The Endowed Schools Acts gave power to make Schemes so as to render any educational endowment most conducive to the advancement of the education of boys and girls or either of them, and to alter or add to any existing trusts and to make new trusts.

(*c*) Whereas a Scheme can be made under the Charitable Trusts Acts only if the original trusts have failed and become incapable of fulfilment (not because the Court or the Board think that other trusts would be more beneficial, *re* Weir Hospital, [1910] 2 Ch. 124), Schemes can be made under the Endowed Schools Acts for all foundations subject to those Acts if the Board think it desirable.

(*d*) A Scheme under the Charitable Trusts Acts must provide for the application of the income of the foundation as near as may be to the original trusts, and only in very exceptional circumstances can it provide for the enlargement of the area or class of benefit. Under the Endowed Schools Acts the requirement is that a Scheme must have due regard to the educational interests of any class of persons (Endowed Schools Act, 1869, sec. 11) or persons of any class of life (Endowed Schools Act, 1873, sec. 5) whose privileges are affected by a Scheme—the cases show that very little is sufficient to satisfy due regard (*re* Grammar School at Hemsworth, 12 A.C. 444; *re* Berkhamsted Grammar School, [1908] 2 Ch. 25). Express provision is made (Endowed Schools Act, 1869, sec. 12) for extending so far as may be the benefits of endowments to girls.

II

There is substantial difference between the foundations which may be dealt with. The Charitable Trusts Act, 1853, sec. 62, and the Charitable Trusts Amendment Act, 1855, sec. 49, exempt from the Board's jurisdiction under those Acts the Universities of Oxford, Cambridge, London, or Durham, or any College or Hall in the Universities of Oxford, Cambridge, or Durham (the newer universities are for the most part exempt by special Acts), Eton and Winchester, any foundation maintained by voluntary contributions and, in the case of a mixed foundation, i.e. one partly maintained by voluntary subscriptions and partly by income from endowment (defined—Charitable Trusts Act, 1853, sec. 66—as meaning any real or personal estate held in trust for a charity for the time being), the jurisdiction extends only to the income from endowment. These provisions as to voluntary contributions and voluntary subscriptions have been the subject of many decisions of the Court (e.g. *re* Clergy Orphan Corporation, [1894] 3 Ch. 145; *re* Gilchrist Trust, [1895] 1 Ch. 367; and *re* Stockport Schools, [1898] 2 Ch. 687), which are not always easy to reconcile—but it would appear that in the case of a mixed foundation any endowment which may legally be spent as income is exempt from the jurisdiction. (It may be noted that the jurisdiction may, on the application of the trustees, be extended to an exempted charity (Charitable Trusts Act, 1869, sec. 14)). Under the Endowed Schools Acts the jurisdiction, subject to the exceptions mentioned below, extends (Endowed Schools Act, 1869, sec. 5) to any educational endowment (endowment means, Endowed Schools Act, 1869, sec. 4, every description of property which is dedicated to charitable uses), which is applicable for the education at school of boys or girls or of exhibitions tenable at a school or university or elsewhere, or of buildings, houses, or school apparatus. On the other hand, the seven public schools mentioned in the Public Schools Act, 1868, sec. 3, any school which on January 1st, 1869, had no endowment except school buildings, any school which on August 2nd, 1869, other than a Grammar School under the Act of 1840, was in receipt of a grant, any school (not being a Grammar School) which on August 5th, 1873, was an Elementary School and had a gross average income from endowment of less than £100 in the three years preceding that date (in the last two mentioned cases the Elementary Education Act, 1870, sec. 75, confers power to approve, with or without modifications, a Scheme submitted by the Governing Body), any endowment applicable for promoting the education of the ministers of any church or for teaching any particular profession or any school used solely during the six months before January 1st, 1869, for the education of choristers, are all exempt from the jurisdiction under the Endowed Schools Acts. It may be noted that under the Welsh Intermediate Education Act, 1889, there is power to deal with many foundations which are exempt under the Endowed Schools Acts (Welsh Intermediate Education Act, secs. 12 and 13). Except with the assent of the Governing Body, Schemes cannot be made for endowments given to charitable uses less than fifty years before August 2nd, 1869 (when the Endowed Schools Act, 1869, came into operation), or interfering with the constitution of the Governing Bodies of cathedral schools,

Quaker or Moravian schools, or schools or exhibitions—unless restricted to any schools or district—forming part of the foundation of any College at Oxford or Cambridge.

It is probable that, as the law officers advised the Charity Commissioners in 1899, a foundation which came into existence since the date of the Endowed Schools Act, 1869, is not subject to the jurisdiction thereunder.

III

The Charitable Trusts Acts require a Scheme to be made upon application which must, where the income is £50 or over, come from the Governing Body. No application is required for an Endowed Schools Scheme.

IV

There is an appeal to the Court of Chancery against a Scheme under the Charitable Trusts Acts, but only by the Attorney-General or some person authorised by him or by the Board (Charitable Trusts Act, 1869, sec. 10). In the case of an Endowed Schools Scheme there is no appeal to the Court of Chancery, but there is, where the income is £100 or over, an appeal on certain specified legal grounds to the Judicial Committee (Endowed Schools Act, 1869, secs. 39 and 42, and Endowed Schools Act, 1873, sec. 14), and there is an appeal to Parliament on the merits (Endowed Schools Act, 1873, secs. 13 and 15)—an adverse vote of either House is fatal.

V

A Scheme made under the Charitable Trusts Acts can, on sufficient application, be altered by another Scheme either by the Court or the Board; an Endowed Schools Scheme has the same effect as if it were part of the Endowed Schools Acts—it can only be altered by a Scheme made under the Charitable Trust jurisdiction if it so provides. A Scheme cannot be made by the Courts for any foundation subject to the Endowed Schools Acts without the consent of the Board (Endowed Schools Act, 1874, sec. 6).

VI

An Endowed Schools Scheme can alter or abrogate Statutory Trusts; a Charitable Trusts Scheme can only do so if the Statute confers the power.

Supervision and Control

With regard to *Supervision* and *Control*, the approval of the Board is required to any sale, exchange, or charge of the Charity estate or any lease for more than twenty-one years or in consideration partly or wholly of a fine unless authority has been given by Act of Parliament or by a competent court or by a Scheme legally established. Neither a trust deed (*re* Mason's Orphanage, [1896] 1 Ch. 596) nor a charter (A.G. *v.* National Hospital, [1904] 2 Ch. 252) is such a scheme. A charge is created if money is borrowed from a Bank (Fell *v.* O.T. of C.L., [1898] 2 Ch. 44). A lease made without approval is void, not merely voidable (Bp. of Bangor *v.* Parry, [1891] 2 Q.B. 377).

No legal proceedings, except in a matter actually pending, can be taken (otherwise than by the A.G. *ex-officio*) without the consent of the Board (Charitable Trusts Act, 1853, secs. 17 and 18) if the proceedings involve questions of the administration of the trusts (Holme *v.* Guy, 5 Ch.D. 905). Trustees who act on the opinion and advice of the Board are thereby indemnified.

The Board may authorise the institution of legal proceedings (Charitable Trusts Act, 1853, sec. 19), or they may certify to the Attorney-General any case in which they consider that proceedings should be taken by him (Charitable Trusts Act, 1853, sec. 20); they may also themselves take proceedings to recover property of a trust, the gross annual value of which does not exceed £20 (Charitable Trusts (Recovery) Act, 1891, sec. 3).

Compromises of disputes between trustees and other persons may be sanctioned by the Board (Charitable Trusts Act, 1853, sec. 23, and Charitable Trusts Amendment Act, 1855, sec. 31)—this power is mainly used, by a legal fiction, to make Orders redeeming rent charges.

The Board may authorise the application of Charity money to any beneficial purpose consistent with the trusts (Charitable Trusts Act, 1860, sec. 15). Powers of enquiring into administration are conferred by the Charitable Trusts Act, 1853, secs. 9–14 and the Charitable Trusts Amendment Act, 1855, secs. 6–9).

Accounts must be sent to the Board annually (Charitable Trusts Amendment Act, 1855, secs. 44 and 45), and in the case of parochial non-ecclesiastical Charity in a rural parish must be laid before the parish meeting (Local Government Act, 1894, sec. 14 (6)).

The Charitable Trusts Acts provide for an Official Trustee of Charity Lands to hold the legal estate in land, and Official Trustees of Charitable Funds to hold personal investments for Charities. The powers of the Charity Commissioners in these matters have not been transferred to the Board, but under sec. 45 of the Education Act, 1918, an Order in Council can be made constituting and incorporating these officials for educational foundations.

The income of Charities from endowment—whether real or personal—is exempt from income tax (Income Tax Act, 1918, sec. 37).

There is also an exemption (Income Tax Act, 1918, Schedule A, No. VI, Rule 1) from income tax under Schedule A of the buildings of any College or Hall of any University so far as not occupied by any member thereof or by any person paying rent, and also of the amount expended on the repairs of these buildings and of the gardens and recreation grounds attached; there is a similar exemption in respect of a public school (on the question of what is a public school for this purpose, see G.P.D.S. Ltd. *v.* Ereant, [1931] A.C. 12). Other lands owned and occupied by a Charity are exempt from income tax under Schedule A by the Finance Act, 1921, sec. 30, and this section also exempts lands occupied by a Charity from income tax under Schedule B.

The profits of a school were formerly subject to income tax under Schedule D (Brighton College *v.* Marriott, [1926] A.C. 192), but they are exempted by the Finance Act, 1927, sec. 24, if the profits are applied solely to the purposes of the school, and if the school is a "charity."

The Finance (New Duties) Act, 1916, and the Finance Acts, 1916, 1921, and 1924, contain certain provisions as to exemption from Entertainment Duty in respect of entertainments wholly or partly educational, and of entertainments provided by educational institutions.

There is no general exemption of the property of charities from rates—it is, however, exempt from rates levied under statutes incorporating the Towns Improvement Clauses Act, 1847.

But Societies established exclusively for the purposes of science, literature, or the fine arts are exempt from rates (6 & 7 V.C. 36), and the premises of non-provided public Elementary Schools are—except to the extent of any profit derived from letting—also exempt (Education Act, 1921, sec. 167).

H. J. SIMMONDS.

CHAPTER TWO

SCOTLAND

THE references in brackets are to the section and date of the Education (Scotland) Act in which the matter is dealt with, except that the year 1890 refers to the Education of Blind and Deaf-Mute Children (Scotland) Act, 1890; the year 1893 to the Day Industrial Schools (Scotland) Act, 1893; the year 1906 to the Education of Defective Children (Scotland) Act, 1906; and the year 1914 to the Education (Scotland) (Provision of Meals) Act, 1914. C.A., 1908, refers to the Children Act, 1908; C.A., 1932, to the Children and Young Persons (Scotland) Act, 1932; M.D., 1913, to the Mental Deficiency and Lunacy (Scotland) Act, 1913; and L.G., 1929, to the Local Government (Scotland) Act, 1929. In the references to cases, S.C. means Sheriff Court; C.S. means Court of Session; J.A.C. means Justiciary Appeal Court; and H.L. means House of Lords.

School Accommodation and Attendance

The Education Authority must provide sufficient accommodation in public schools for all persons resident in their area who are not being efficiently educated otherwise (26/1872). They must maintain and keep efficient every school under their management and in the event of failure to do so, or to provide additional necessary accommodation, they may be required by the Department to fulfil their duty (36/1872). They must pay the cost of the education of children from their area attending a school outside if there is no suitable and accessible school in their own area (10/1918).

Every parent must provide efficient education for his children between 5 and 14 years of age (7(1)/1908). If the Education Authority have prescribed dates for commencing and terminating attendance, children must attend till the date following their fourteenth birthday (7(3)/1908). It is the duty of the Education Authority to take proceedings to compel the attendance of children at school unless they are being efficiently educated otherwise, or have a reasonable excuse for failure to attend (70/1872, 28/1878, 12/1883, 4/1893, 8/1908). Prevention by sickness or other unavoidable cause is a reasonable excuse, or a distance of over three miles from a school (11/1883), if the Education Authority have not provided reasonable facilities for conveyance (1/1928). Individual children over 12 years of age may be exempted by the Education Authority from the obligation to attend school if the circumstances justify exemption (3/1901).

The Children and Young Persons (Scotland) Act, 1932, provides for the constitution of Juvenile Courts of summary jurisdiction to hear charges against children and young persons, and proceedings under section 70 of the Education (Scotland) Act, 1872, or section 4 of the Day Industrial Schools (Scotland) Act, 1893; and that no such charge or proceedings shall be heard by a court of summary jurisdiction which is not a Juvenile Court. These provisions have not yet, however, been brought into operation, and will only apply in such areas as the Secretary of State may prescribe.

The Court have power to interfere with the action of the Department as to school accommodation only where they have gone beyond the Statutes or failed to apply their minds to the question (Lord Advocate *v.* Stow School Board, February 1876. C.S.; Lord Advocate *v.* Strathmiglo School Board, November 1876. C.S.; McLean, etc., *v.* Kilbrandon and Kilchattan School Board, November 1877. C.S.).

Exclusion of a child from one school is not a reasonable excuse for non-attendance at another (Cummertrees School Board *v.* Irving, November 1886. S.C.). A parent has not a right to demand by power of law accommodation for his children (Forsyth and Others *v.* Slamannan School Board, December 1908. S.C.). Exclusion from the nearest school is not a reasonable excuse if another school is available within three miles (Muiravonside School Board *v.* Mackay, etc., January 1909. S.C.). Exclusion from school for refusal to take part in physical exercises does not exempt a parent from the duty of educating his child (Barr *v.* Smith, High Court, January 1903). A child may be required to attend a school where higher instruction is given (Grangemouth School Board *v.* McLure, November 1906. S.C.). The Education Authority are not bound to supply books to children attending their schools and may exclude a child whose parent refuses to provide them (Haddow *v.* Glasgow School Board, June 1898. C.S.). The question whether the nearest school is within three miles from a child's residence measured according to the nearest road is a pure question of fact to be decided by the Sheriff. Road does not mean turnpike road, but any road suitable for a child walking to school (School Board of Alyth *v.* Christie, May 1913. C.S.). An Education Authority may refuse admission to a particular school and prosecute for failure to educate when another school is available (Calder *v.* Aberdeen Education Authority, December 1925. J.A.C.; Coultie *v.* Dundee Education Authority, January 1926. S.C.). An Education Authority are entitled to prosecute for failure to educate, and this right does not belong solely to the School Management Committees (Middleton *v.* Wilson, March 1924. J.A.C.). Absence from roll-call may be regarded as non-attendance for purposes of prosecution (Renfrewshire Education Authority *v.* Farmer, November 1927. J.A.C.). A contribution under Section 10 of the Education (Scotland) Act, 1918, is not due in the case of poor-law children boarded out in another area, the householders with whom the children are boarded being the parents in the sense of that section (Education Authority of Bute and Others *v.* Education Authority of Glasgow, March 1923. C.S.). A contribution is, however, due in the case of children boarded in another area by their parents in order to attend a secondary school (Education Authority of Ayr *v.* Education Authority of Bute, March 1925. C.S.). The question whether adequate provision has been made for secondary education without payment of fees is one for the Department and not for the Courts (Dundee Education Authority *v.* Quinn and Others, November 1929. C.S.).

Children in Outlying Districts

In order to bring opportunities for education within easier reach of children in outlying parts of their area an Education Authority may provide means of conveyance, or pay travelling expenses for teachers or pupils, or provide lodging or board and lodging near a school, or defray the cost of such provision, on such terms and conditions as they consider reasonable, having regard to all the circumstances including the circumstances of the parents (3(3)/1908 as amended by Fifth Schedule, 1918). If such provision involves less cost than the provision of new school accommodation or the continuance of existing school accommodation, which would otherwise be necessary, it may be made with the consent of the Department without regard to distance or the circumstances of the parents (4/1925). An Education Authority with the Department's approval may provide by themselves or in combination with other Authorities or bodies hostels for pupils attending intermediate and secondary schools. The scale of charges should defray net expenses, but a deficit may be met from the Education Fund with the consent of the Department (20/1908). They may maintain an employment agency (3(5) 1908).

Blind and Deaf-mute Children and Defective Children

The fact that a child is blind or deaf-mute is not a reasonable excuse for non-attendance at school (5/1890). It is the duty of the Education Authority,

if the parent is unable to do so, to provide education and, if necessary, board and conveyance for such children from the age of 5 till the age of 18 (3/1890 as amended by Fifth Schedule, 1918). The education includes industrial training, and if the Education Authority fail to discharge their duty they may be compelled by the Sheriff, whose decision is final (3/1890). An Education Authority may contribute to or themselves provide schools for such children (4/1890). An Education Authority are required by the Blind Persons Act, 1920, to make or otherwise secure adequate provision for the technical education of blind persons ordinarily resident in their areas who are capable of receiving and being benefited by such education.

An Education Authority may make special provision for the education of defective children from the age of 5 till the age of 16, and, where required, for their conveyance to and from school (1/1906). They may contribute to or provide for the maintenance and education of such children (or others certified to require special arrangements for their education) in homes or other institutions within or without the area (5/1925). Where special provision for the education of defective children is made, the parents may be required to provide efficient education for such children until the close of the school session in which they attain the age of 16 (5/1908 amended by Fifth Schedule, 1918).

It is the duty of the parent or guardian to provide for the education of mentally defective children who can benefit thereby from the age of 5 till the age of 16. If the parents are unable by reason of the expense to make such provision, the duty falls upon the Education Authority (2(1)/M.D., 1913). They must ascertain what children in their area are mentally defective and which of them are unfit to benefit by instruction. In the latter case the duty of care and supervision devolves upon the Town or County Council, to whom the names of the children must be notified, and any question in dispute is settled by the Department (2(2)/M.D., 1913). The children fit to benefit by instruction may be provided for in special schools (1/1906) or in homes or institutions (5/1925) or in certified institutions or by being placed under guardianship (4(1)/M.D., 1913).

An Education Authority are not bound by the Act of 1890 to provide for the education, board, etc., of a child whose father is in a poorhouse (Edinburgh Parish Council *v.* School Board, December 1897. S.C.). A parent is entitled to claim that provision shall be made for a deaf-mute child in an available and suitable institution conducted in accordance with his religious persuasion (Maley *v.* Dalziel School Board, February 1914. S.C.). The duty of providing food, clothing, and lodging for mentally defective children chargeable to the poor law rests upon the Poor-law Authority, not upon the Education Authority (Glasgow School Board *v.* Glasgow Parish Council and District Board of Control, November 1915. C.S.). The Education Authority and the Department are the proper judges as to whether a child is defective, and the Courts will not enquire into the correctness of their decision except upon relevant averments of *mala fides*, oppression, or the like. An attendance order may be enforced in the case of a defective child between 14 and 16 (Sinclair *v.* Moulin School Board, March 1908. C.S.; Farquhar *v.* Aberdeen School Board, March 1918. S.C.).

Provision of Books, Meals, Clothing, etc.

An Education Authority may provide pupils attending state-aided schools within their area with school books, writing materials, stationery, etc., if they consider such provision required (3(6)/1908). An Authority for a county may also provide books and make them available for the use of school children and young persons attending schools and continuation classes, and for the adult population, and may enter into arrangements with public libraries for these purposes (5/1918). The administration of the Public Libraries Acts in the landward area of a county may be placed under the general supervision of the Education Committee (14(7)/L.G., 1929).

An Education Authority are empowered to provide for the preparation and supply of meals for pupils attending any school in their area (3(2)/1908); and meals may be supplied on any day, whether a school day or not (1/1914). The cost of food can only be met from the Education Fund if the parents or guardians are unable from poverty or ill health to supply it (6(2)/1908). An Authority may make arrangements for attending to the health, nourishment and physical welfare of children attending nursery schools (8(b)1918). They may supply milk to pupils attending schools in their area in accordance with a scheme approved by the Scottish Education Department and the Department of Health for Scotland (1/1930).

An Education Authority are empowered and may be required by the Department to provide for the medical inspection and supervision of pupils attending schools within their area (4/1908). If it is brought to their notice that children attending their schools are in a filthy or verminous state, or unable by reason of lack of food or of clothing to take full advantage of the education provided, it is their duty to make necessary provision for personal attention and food and clothing. The cost of such provision may be recovered from the parent if he is not unable from poverty or ill health to make it, and he may be prosecuted for neglect (6/1908). An Education Authority have also similar powers as regards the provision of medical, surgical and dental treatment (3/1913). They may in certain circumstances have verminous and dirty children removed from school and cleansed (122/C.A., 1908).

An Education Authority may provide in their Scheme of Administration that any assistance which might be provided either by way of poor relief or by virtue of the Education (Scotland) Acts shall be provided exclusively under the latter and not by way of poor relief. This provision applies to mentally deficient persons, children under 5 years of age, and blind persons, and to the feeding, clothing and treatment of children (14(4)/L.G., 1929). The Education Authority must arrange with the Town Council of a large burgh for the utilisation of the medical and nursing staff of the Town Council, and the clinics and hospitals under the control of that Council, for the purpose of the medical inspection, supervision and treatment of the children attending schools within the burgh (14(5)/L.G., 1929).

An Education Authority may bring a child or young person needing care or protection before a Juvenile Court, and it is their duty to do so in certain cases; and the Department may by general or special order authorise any officer of a society, or person, to take similar action (6/C.A., 1932). An Education Authority are notified of the proceedings and required to furnish the court with information as to the home surroundings, school record, health and character of a child or young person and the available approved schools (15/C.A., 1932). The court may order the child or young person to be sent to an approved school, or committed to the care of a fit person, whether a relative or not, who is willing to undertake this office (6/C.A., 1932). A child may be similarly dealt with in the case of non-compliance with an attendance order (9/C.A., 1932). An Education Authority may be a fit person and children and young persons may be committed to their care. The authority may board out such boys and girls, or apply for their committal to an approved school if under 17 years of age (20/C.A., 1932). A boy or girl must if possible be boarded out with a person of the same religious persuasion, or one who gives an undertaking that he or she will be brought up in accordance with his or her religious persuasion (22/C.A., 1932).

Education Authorities are responsible for the maintenance of persons sent to approved schools (30/C.A., 1932); and may undertake the care of children or young persons committed to their charge as fit persons (20/C.A. 1932).

An Education Authority are not bound to supply school books to children attending their schools (Haddow *v.* Glasgow School Board, June 1898. C.S.). If they do so, they cannot claim cost from parents or employers

unless they can prove a mandate (Dundee School Board *v.* Gilroy and Sons, June 1899. C.S.). The Poor-law Authority must pay for books for poor-law children if not supplied by the Education Authority (Arbroath (Burgh) School Board *v.* Parish Council, June 1890. S.C.). A rate-payer cannot interdict an Education Authority from selling school books (Mackenzie *v.* Renfrew School Board, June 1902. S.C.). Parents may be prosecuted for failure to provide necessary books (Glasgow Education Authority *v.* Denny and Others, February 1922. S.C.).

Religious Instruction and Denominational Schools

The preamble to the Education (Scotland) Act, 1872, refers to "the custom in the public schools of Scotland to give instruction in religion to children whose parents did not object to the instruction so given, but with liberty to parents, without forfeiting any of the other advantages of the schools, to elect that their children should not receive such instruction" and states "that it is expedient that the managers of public schools shall be at liberty to continue the said custom." It is accordingly provided that all public schools and all schools subject to inspection and in receipt of grants shall be open to children of all denominations, and that parents may withdraw their children from any religious instruction and observances without disadvantage as regards secular instruction. The times for any religious instruction or observance must be before and after the ordinary instruction and must be specified in a table approved by the Department (68/1872). The continuance of the custom, subject to these provisions, is expressly authorised by Section 7 of the Act of 1918. All matters relating to the provision of instruction in religion must stand referred to the Education Committee of the Council, and before exercising any functions relating to such instruction the Council must, unless the matter is urgent, consider the report of the Education Committee (12(3)(b)/L.G., 1929). It is not lawful to discontinue the provision of instruction in religion unless and until a resolution in favour of such discontinuance duly passed by the Council has been approved by a majority of the electors at a poll taken for the purpose (31/L.G., 1929). It is not the duty of His Majesty's Inspector to examine or enquire into religious instruction (66/1872) and no grants may be made in respect of such instruction (67/1872). The Education Authority are required to have due regard to the religious persuasion of the parents in providing for children in homes or institutions (5/1925) or for blind or deaf-mute children (6/1890).

The Act of 1918 provided for the transfer to the Education Authority of voluntary denominational schools (Section 18(1)) and for the discontinuance of grants in respect of any such schools which were not so transferred (Section 18(4)). The schools transferred become public schools, but the teachers must be approved as regards religious belief and character by representatives of the churches and denominational bodies interested and the time set apart in them for religious instruction and observances must not be less than formerly (Section 18(3)). New schools to which these conditions apply may be established on certain conditions with the consent of the Department (Section 18(7) and (8)). The Education Authority must appoint a supervisor, approved as regards character and religious belief, of the religious instruction given in such schools (Section 18(3)(iii)).

It has been held that an Education Authority are entitled to use a school transferred to them under the Act of 1872 as a school for Roman Catholic children and to appoint Roman Catholic teachers (Glasgow School Board *v.* Anderston Kirk Session and Others, December 1909. C.S.). An Education Authority are bound to maintain a voluntary school transferred to them under Section 18 of the Education (Scotland) Act, 1918, as a public school of the same character and status as at the date of transference, and providing similar instruction to that provided at that date, and may not alter the status of the school by limiting the instruction to infant and junior stages if it formerly extended beyond these (Episcopal Church Council *v.* Education

Authority of the County of Aberdeen, March 1924. C.S.). An Education Authority are bound to accept the transfer of a denominational school established after 1918, to which Section 18(7) of the Education (Scotland) Act, 1918, applies if the managers of the school, with the consent of the Department, make application for such transfer (Smith and Others *v.* Stirlingshire Education Authority and Another, December 1929. H.L.).

Educational Endowments

The numerous and valuable educational endowments in Scotland are at present under review by a Royal Commission appointed as provided by the Educational Endowments (Scotland) Act, 1928. The Commission are empowered by this Act to prepare schemes for the future government and management of educational endowments which may provide for grouping, amalgamating, combining or dividing any such endowments, for altering the constitution of governing bodies, for altering the purposes to which the endowments may be applied, and for the application of the capital or income to such educational purposes, mental or physical, moral or social, as the Commissioners think fit, having regard to the public interest and to existing conditions social and educational. The Act provides for the publication of draft Schemes and of the Schemes as submitted to the Scottish Education Department for approval and for the due consideration of representations in each case, and the governing body or other persons interested may submit a special case to the Court of Session on questions of law within one month of the first publication of a Scheme. A Scheme becomes effective on its approval by Order in Council. A Scheme relating to an endowed school must make provision for the application in the case of the dismissal of a certificated teacher of the provisions of Section 21 of the Education (Scotland) Act, 1908, and may confer upon any other officer or teacher a right of appeal against dismissal to such authority and on such conditions as to the Commissioners may seem fit. The powers of the Commissioners were to come to an end on December 31st, 1931, but have since been extended for three years. At the expiry of that period these powers will be exercised by the Scottish Education Department.

The Commissioners have had under review about 1,400 endowments, and have published a considerable number of draft Schemes, of which a proportion have been submitted to the Department and a certain number approved by Order in Council. It would appear from the Schemes already published to be one of the intentions of the Commission to establish an Educational Trust for the area of each Education Authority, by the amalgamation of the smaller endowments available within the area, and to constitute a Governing Body of the Trust representing the Education Authority and other local interests. The funds of the endowment in such cases are to be devoted to the development of additional educational and recreational facilities within the area in accordance with the provisions of the Scheme and with a plan which is to be submitted by the Governing Body for the approval of the Scottish Education Department. Four reports by the Commissioners to the Department, giving an account of their findings, have been published.

Teachers

Teachers are appointed during the pleasure of the Education Authority (55/1872). They cannot, however, be dismissed unless written notice of the motion for dismissal is given to the teacher and each member of the Education Authority, not less than three weeks before the resolution is adopted. At least one-half of the members of the Education Authority must be present at the meeting at which the resolution is adopted, and it must be agreed to by two-thirds of the members present (24/1918). A certificated teacher so dismissed may appeal to the Department within six weeks, and if the Department, after enquiry, do not regard the dismissal as reasonably justified, they must request the Authority to reconsider the resolution. If the Authority do not depart from the resolution within six

weeks, the Department may attach a condition that the teacher shall be paid such sum not exceeding one year's salary as they may determine. This sum may be recovered as a debt (21/1908).

A teacher may be summarily suspended by an Education Authority or a school management committee, but this does not affect his right to the salary and emoluments of his office (24/1918).

An education authority must submit for the approval of the Department a scheme of scales of salaries for teachers satisfying the conditions of minimum national scales laid down by the Department after consultation with representatives of the Education Authorities and the teaching profession (6(1)(c)/1918). Teachers in schools transferred to the Education Authority under Section 18 of the Act of 1918 are in the same position as regards salaries as teachers in other public schools ; and a contribution can only be made by an Education Authority to a school not under their management if the teachers are paid not less than the scale for teachers similarly qualified in their own employment (9(1)/1918).

It has been held that a teacher is entitled to three months' notice of dismissal (Morrison *v.* Abernethy School Board, July 3, 1876. C.S. ; Robson *v.* Overend, November 1878. C.S. ; Hinds *v.* Dunbar School Board, June 1883. C.S.). The procedure prescribed must be followed if the dismissal is to be valid (Robson *v.* Gordon School Board, December 1888. C.S.). The minute must show that the resolution was carried (Tarbert School Board *v.* Aird, February 1905. C.S.). A resolution to appoint a teacher cannot be rescinded without notice (Reid and Brown *v.* Glamis School Board, May 1889. S.C.). A dismissal may be invalid if one of the necessary majority of the members is found not to have been properly elected (Skene School Board *v.* Anderson, August 1892. S.C.). An interim teacher appointed for three months is not entitled to claim that the statutory provisions as to dismissal must be complied with. A School Board may suspend a teacher summarily and are not liable for damages, even if malice is alleged (Robson *v.* Hawick School Board, January 1900. C.S.). The decision of the Vice-President of the Department on an appeal against dismissal of a teacher is valid as the decision of the Department (Dalziel School Board *v.* Scottish Education Department, December 1914. C.S.). A teacher is entitled to payment during period of notice of resignation extending over holidays (Stalker *v.* Bothwell School Board, December 1913. S.C.). A competent resolution granting a retiring allowance to a teacher cannot be rescinded by a newly elected School Board (Campbell *v.* Muiravonside School Board, February 1915. C.S.). A resolution by a School Board granting a retiring allowance to a teacher immediately before the transfer of powers to the Education Authority and an increase in retiring allowances under the Superannuation Acts has been held to be unreasonable and *ultra vires* (Downie *v.* Renfrewshire Education Authority, December 1920. C.S.). A resolution for dismissal passed by twenty-three out of thirty-five members present is illegal (Emslie *v.* Ayrshire Education Authority, June 1921. C.S.). An Education Authority are entitled to decide whether a teacher is a principal teacher for the purposes of their salary scale if the scheme approved by the Department so provides (Weir *v.* Lanarkshire Education Authority, June 1922. C.S.). A teacher is not entitled to payment of salary for period of notice of resignation so far as covered by holidays if he has accepted employment and is being paid for the same period by another Authority (Lipp *v.* Banffshire Education Authority, April 1923. S.C.). The Education Authority cannot enforce or the Department approve a revised scale of salaries retrospectively, to operate before the actual date of approval by the Department (Coull *v.* Fife Education Authority, January 1925. C.S.). Absence on account of childbirth is not a sufficient reason for terminating an appointment (Davie *v.* Lanark Education Authority, June, 1924. S.C.). An undertaking to resign at 60 given by a teacher in order to avoid dismissal may be enforced (Dumfries Education Authority *v.* Wright, January 1926. C.S.). An

action for damages brought by a dismissed teacher against an Education Authority must be timeously instituted in view of the provisions of the Public Authorities Protection Act, 1893. It is for the Education Authority to determine whether their administration is best secured by publishing their minutes containing references to teachers in the execution of their statutory duty (Cherry Smith *v.* Glasgow Education Authority, March 1931. C.S.).

Employment of Children

The powers and duties of education authorities and the law relating to the employment of children and young persons in Scotland are considerably affected by Part IV of the Children and Young Persons (Scotland) Act, 1932, which came into operation on November 1st, 1933. Under this Act the Education Authority are the responsible authority for the purpose of the regulation of the employment of children and young persons, including employment in street trading.

The Act provides that no child under 12 years of age may be employed, except by his parent or guardian in light agricultural or horticultural work if that employment is authorised by by-law. No child may be employed before the close of school hours on any day on which he must attend school, except that by-laws may authorise employment for not more than one hour before the school opens. No child may be employed before 6 a.m., or after 7 p.m. in winter or 8 p.m. in summer, or for more than two hours on any Sunday or any day on which he must attend school. No child may be employed to lift, carry or move anything so heavy as to be likely to cause injury to him.

An Education Authority may make by-laws as to the employment of children imposing additional restrictions, and may prohibit the employment of children in any specified occupation, and prescribe the age below which children are not to be employed, the number of hours daily and weekly, and the times of employment, the intervals and holidays or half-holidays to be allowed, and any other condition of employment. The Act includes similar provisions as to by-laws relating to the employment of persons under the age of 18 years but not being children (with certain exceptions), but these provisions are not to come into operation until a resolution has been passed by both Houses of Parliament.

No person under the age of 17 may engage or be employed in street trading, except by a parent if this is permitted by by-law. An Education Authority may make by-laws regulating or prohibiting street trading by persons under 18, forbidding such trading except on licence, determining the days, hours and places of such employment and regulating in any other respect the conduct of such persons while so employed.

An Education Authority, subject to any restrictions and conditions prescribed by the Scottish Education Department, and without prejudice to the provisions of the Act as to employment, may grant a licence to any child of 12 to take part in an entertainment or series of entertainments, if satisfied that he is fit and that proper provision has been made to secure his health and kind treatment, but no licence may be granted for an entertainment on Sunday. If the applicant for or holder of such a licence is aggrieved by a decision of the Education Authority he may appeal to the Scottish Education Department, who may thereupon exercise the powers conferred upon the education authority.

No boy under 16 and no girl under 18 may take part in any public performance in which his or her life or limbs are endangered, and no person under 12 years of age may be trained to take part in performances of a dangerous nature. An Education Authority may grant a licence for a person between 12 and 16 to be trained for such performances, specifying the place of training and the conditions for the protection of the person, and the licence may not be refused if the Education Authority are satisfied that the person is fit to be trained and that proper provision has been made for his health and kind treatment. Due notice of the application for a

licence must be given to the police, and the licence may be revoked, on cause shown, by the Education Authority which granted it.

The employment of a child under 14 in an industrial undertaking, or on a ship (unless only members of the family are employed therein), is prohibited by the Women, Young Persons and Children Employment Act, 1920.

The Secretary of State with the consent of the Treasury is empowered by the Act of 1932 to transfer any of his powers under the Act (except those relating to Juvenile Courts) to the Scottish Education Department or the Department of Health for Scotland if he thinks fit to do so; and the powers relating to the employment of children have been transferred to the Scottish Education Department.

[*Contributed.*]

Events in Education in the English-speaking Nations

CHAPTER ONE

GREAT BRITAIN

I. The Economic Depression

THE summaries of English and Scottish education and educational finance in Part I of this volume and the chapters on various aspects of education in those countries in later sections of Part II make it, perhaps, unnecessary to add any extended survey of the events of the past year. As in other countries, educational policy in Great Britain has been dominated by the economic depression, and it may be sufficient to indicate its general trend.

General Character of the Economy Policy

In general, there has been, perhaps, no such violent reaction as, to judge from the succeeding chapters of this Section, the other English-speaking nations have had to suffer. This is, no doubt, partly due to the fact that Great Britain did not share the fictitious prosperity or the " boom " psychology which, in other countries, marked the five years or so before 1929. It was only in the eighteen months between the end of 1929 and the summer of 1931 that her educational expenditure rose steeply. Otherwise, her policy was steadier, and her descent from the peak of 1931, though steep, has not carried her, broadly speaking, below the level which she had reached in 1929. Indeed, as will be seen from the financial tables on pages 200 and 220, educational expenditure in England and Wales (even apart from teachers' pensions) is still £1,700,000 and in Scotland nearly £400,000 more than in the year 1928–9.

Since the salary cuts and the modifications of the grant system carried out in the autumn of 1931, the English and Scottish departments have continued to exert a steady general pressure in the direction of economy, and during 1932 the English Board of Education took a number of specific steps to reduce expenditure in certain definite directions. There were, for instance, the circular on economy in school buildings, the substitution of Special Places, carrying with them remission of fees in proportion to the means of the parents, for Free Places in secondary schools, and

the restriction of entry into the training colleges, all of which were referred to in the last volume of the YEAR BOOK. But during 1933 the Board has been comparatively inactive. With one notable exception to be mentioned later, the steps taken in 1932 seem to have exhausted its economical inventiveness. Indeed, the Government has been obviously unwilling to commit itself to any drastic measures of economy, either in education or in other fields of public expenditure. It would probably not be unfair to say that Parliament, local authorities and public opinion generally have been cherishing the trembling hope that commodity prices may return near enough to the 1929 level to justify a continuance of public expenditure more or less on that level, and in that hope they have been content to pursue a waiting policy.

The Two Committees on Local Expenditure

This attitude of watchful waiting has been reflected in the way in which the Government has handled, or refrained from handling, the Reports of the two Committees on Local Expenditure, composed of representatives of the local authorities of England and Wales and Scotland respectively, which were constituted in response to an invitation from the Government on July 1st, 1932, and reported in November of that year. So far as education is concerned, the Reports of these two Committees followed the same general lines, except that the Scottish Committee proposed a cut of 15 per cent. below the scales in force before the crisis in the salaries of new entrants into the teaching profession, and of 12½ per cent. in the salaries of existing teachers (instead of the temporary 10 per cent. now in force); while the English Committee refrained from proposing any alteration in the maxima and minima of the teachers' scales. The English Committee estimated the *eventual* savings to to be derived from their recommendations at about £5,910,000 a year in addition to measures already taken, such as the modification of the Free Place system. The Scottish Committee estimated the savings on their recommendations at about £950,000 a year, "in addition to a reduction of yearly capital commitments of £500,000."

But, very broadly speaking, the Government has taken little specific action on these recommendations. In so far as they indicate economies which can be carried out by local authorities, they have, on the whole, been left to the good judgment of those authorities. In one matter, and only one, the question of the closure of small schools, the Government has introduced, and Parliament has passed, a small Bill amending the English Education Act so as to permit the closure of schools with an attendance of over thirty children, provided that there are other schools of the same character (i.e. council schools or schools provided by a particular religious denomination, as the case may be) in the neighbourhood reasonably accessible to the children so displaced.

Reduction in Capital Expenditure

In one direction, indeed, the economies effected by the Government may appear to be comparable with those effected in other English-speaking nations. In the twelve months March 1931–March 1932 proposals for capital expenditure approved by the English Board of Education still stood at over £7¾ millions, a sum which, though £5¼ millions below the extraordinary peak of 1930–1, was only about £1 million below the level of 1929–30 and nearly £1 million above the level of 1928–9. Proposals for capital expenditure on elementary school buildings, at nearly £6 millions, though more than £3 millions below the peak of 1930–1, were higher by more than £400,000 than the level of 1929–30 and by more than £1,600,000 than the level of 1928–9. But a drop to rather less than £4¼ millions in the total for 1932–3 seems to show a serious reaction. The fact that the reduced sum is about the same as the average for 1919–1929 is not very consoling, when it is considered that that period included the years of severe economy, 1922 and 1923.

At the same time, the effect of the reduction may easily be exaggerated. Thus during the calendar year 1932, 168 new elementary council schools were opened, and during the year ending March 31st, 1932, preliminary proposals were approved for 141 new schools. Again, during 1931, 145 unsatisfactory schools were removed from the "black list" by closure, replacement or removal of defects, and 154 in 1932, while at the end of 1932 plans had been approved for the removal of a further 182. This is, at least, steady progress and, oddly enough, though it lags considerably behind the rate of progress during the three years 1927–9, when 233, 277 and 326 schools were removed from the "black list," it does not make a bad comparison with the otherwise peak year of 1930, when only 206 schools were removed. It would appear that the hectic attempt to prepare in that year for a raising of the school-leaving age considerably prejudiced progress in improving or replacing existing school buildings.

Expansion in Secondary Education

If we turn from actual expenditure to the results of that expenditure, education in Great Britain presents one feature common to nearly all countries in the present economic crisis, a remarkable expansion of secondary education. In England and Wales the number of pupils in schools recognised for grant on March 31st, 1932, showed, at 432,061, an increase of 20,752 on the previous year, while the numbers on October 1st were again 11,000 higher than in the previous year. This expansion, due, perhaps, largely to the lack of openings for employment and the consequent tendency of parents to postpone the entry of their children into the labour market, is, unfortunately, accompanied by an increasing difficulty in finding employment for secondary school leavers.

Contraction of Part-time Education

In contrast to this increase in secondary school population, attendance at part-time courses of technical or other "further" education shows a serious reduction from 997,670 in 1930–1 to 943,299 in 1931–2. Of this reduction of over 54,000, evening institutes and evening classes and colleges account for over 40,000, 11,000 of the remainder being attributable to courses for teachers. Attendance at evening classes is, indeed, the most sensitive barometer of the expansion or restriction of educational expenditure in Great Britain. Later figures for the country as a whole are not available, but the London County Council estimates that attendance at its evening institutes, which fell from 156,282 in 1930–1 to 141,006 in 1931–2, has further fallen to 128,720 in 1932–3.

This fall is, no doubt, partly due to the fall in the number of students leaving day schools owing to the low birth-rate during the war, and it is certainly also due in large part to the economic depression itself. How far it may be due to an increase in fees is a point on which opinions differ. The opinion of the London County Council is, on the whole, that an increase of fees, such as was recommended by the Committees on Local Expenditure and has been, to some extent, carried out in London, tends to cause an immediate reduction in attendance, but that later the public, as it were, acquires the habit of the new fees and attendance consequently revives. On the other hand, the experience of Kent in this matter is illuminating. In July 1921 this county increased its fees for evening classes from 2*s.* a session for rural classes, 5*s.* for junior classes, and 10*s.* for senior classes to 2*s.* 6*d.*, 7*s.* 6*d.* and 12*s.* 6*d.* respectively. Attendance, which had been 14,382 in 1920–1, fell to 12,832 in 1921–2, and to 10,844 in 1922–3. In July 1923 the fees were restored to the old figure, except that a special fee of 15*s.* was fixed for advanced senior classes, and attendance during the three following years rose immediately to 12,350, 13,174 and 15,609. It is one of the most serious questions of policy whether, at the present time when, owing to the high birth-rate of the years 1919 and 1920 and the persistent economic depression, the continued education of children between 14 and 18 who are nominally in the labour market must assume such special importance, the discouragement of attendance at evening classes, which is by far the easiest path of economy open to public authorities, may not do more lasting harm to the rising generation than even a restriction in the facilities for full-time education. That is a question to which we shall return in Section III of this volume.

The Staffing Circulars

This brings us naturally to the one field of educational expenditure, referred to above, where the Government has taken some positive action in the direction of economy during the year 1933; namely, the staffing of the schools. Following on the recommenda-

tions of the Committees on Local Expenditure, the English Board of Education issued two circulars in May 1933 suggesting a stricter standard of staffing in elementary and secondary schools respectively, Circulars 1427 and 1428. The immediate purpose of these circulars was a purely administrative one. Ever since the revision of the Board's regulations in 1926, local authorities have been required to submit proposals for a block " establishment " of teachers for approval by the Board, instead of applying for approval in detail to changes in school staffing. Local authorities have tended increasingly, it is said, to overestimate their establishments, with obviously inconvenient effects on the reliability of the estimates presented by the Board to Parliament. But behind this immediate administrative purpose there lies one of the most difficult puzzles of educational policy. It is not by any means a puzzle peculiar to Great Britain, but it is one which Great Britain appears to be realising somewhat in advance of other western nations. It is the puzzle of declining population.

The Puzzle of Declining Population

Ever since a Report by the Government Actuary, issued in January 1928, it has been realised that, after the serious temporary " bulge " in school attendance which is now being experienced owing to the high birth-rate of 1919 and 1920, attendance would fall steeply. Further calculations by the Government Actuary, however, issued by the Board of Education in Circular 1426 of April 28th, administered something like a shock to public opinion. From these calculations, to which we have already referred in Part I, Section I, Chapter One, it appeared that attendance at elementary schools in England and Wales must fall from 5,419,000 in 1932 to about 4,900,000 in 1937, and that, on the most favourable probable estimate of the future course of the birth-rate, attendance from 1946 onwards would not exceed 4,461,000, while, on a less favourable estimate, it might well fall by 1948 as low as 4,100,000. Clearly, the raising of the school-leaving age by one year has little relation to such figures as these, especially to their effect on the prospects of employment open to the teaching profession. A raising of the school-leaving age might iron out to some extent the drop in school attendance during the next few years, but it could not affect the steep fall which must subsequently take place ; and, therefore, while holding out to many older teachers the prospect of being able to complete their service and qualify for a pension, it could not much lessen the danger of unemployment which seems to threaten the younger teachers and, above all, those now entering or leaving the training colleges.

Obviously, from the point of view of the teaching profession, the more generous the scale of staffing of schools as they now exist, the larger will be the number of teachers who will be exposed to this danger. From that point of view, the prudent policy would be to enforce an economical standard of staffing while attendance

is large and to adopt an increasingly generous standard as attendance decreases. Equally obviously, however, this point of view has to be reconciled with the other and more important consideration of the claims of the pupil to a standard of staffing sufficiently generous to give him the best educational opportunities. If the Government is to regard itself as responsible for the professional prospects of members of the teaching profession, it must seek the solution of the puzzle along two main lines : the regulation of entry into the profession and the adoption of a deliberate staffing policy. But both these lines must create hardship. In particular, the measures of restriction on entry into the teaching profession which have been adopted both by the English and Scottish departments tend to accentuate the unemployment problem among secondary school leavers.

Restrictions on Entry into the Teaching Profession

In England, the Board of Education began to deal with this matter in the autumn of 1931 when it notified the training colleges that it would be unable to renew for 1932–3 the approval of additional places which had been sanctioned for 1931–2, for the purpose of preparing for the raising of the school-leaving age which was then in contemplation, and that, where additional places had not been so provided for 1931–2, a reduction of 2½ per cent. would be required. This resulted in a reduction in the number of students admitted to the colleges of about 1,000 as compared with the previous year, but did not bring the admissions in 1931–2 materially below the average of the years before 1931. In August 1932, therefore, the Board notified the colleges that the approved numbers of students in training colleges for 1933–4 would be reduced by 10 per cent. This raised difficult problems for the smaller and poorer training colleges, and also for the university training departments, and these problems, though temporarily adjusted, have not been permanently solved. It is one of the evils of official regulation in this field that it tends to stop the healthy rivalry by which the best educational institution attracts most, and the best, students and, worse still, to restrict within even narrower limits than before the freedom of the universities to pass through their training departments the best talent they can select among their ordinary students. Indeed, in the long run, such regulation may prove to be the reverse of economical, for it must tend to exclude from the teaching profession young men and women of ability who could pay for their own training as private students in the colleges or as ordinary undergraduates at the universities and who, in these days of " middle class " unemployment, may be attracted to the teaching profession in the future as they have not been in the past. In fact, the aim of the whole policy is, not economy, but the discharge by the State of a supposed obligation to the members of a public service.

In Scotland the same attempt at regulation tends to fall with

particular severity on university graduates, since it has long been the policy of that country to recruit its teachers from that source. The whole subject was dealt with on pages xxvi–xxvii of the YEAR BOOK for 1933. This year the Central Executive Committee only found itself able to admit to training colleges 755 out of the 1,306 graduates who had applied by April.

The Raising of the School-leaving Age

It may be that this certainty of a heavy decline in school attendance accounts for the waiting attitude of the Government. It offers the prospect of a far larger, and steadily increasing, reduction in expenditure than could be hoped for from a mere hunt after minor administrative extravagances or even from any revision of the existing educational system; and such a reduction has, moreover, the inestimable advantage, from the point of view of parliamentary politicians, of being automatic, involving none of the unpopularity which is the inevitable price of active economy. But it is doubtful whether the Government will be allowed to reap this harvest in the near future. There are signs of a growing agitation for a raising of the school-leaving age to 15 by instalments, spread over three years; and this agitation is likely to be the more formidable for being based on new economic as well as on old educational grounds. Moreover, the complacency with which, as an overcrowded country, we are just now inclined to regard a 20 per cent. shrinkage in our future active population, will perhaps hardly outlast a realisation of what such a shrinkage may mean in relation to the future of Western civilisation. If we regard it to-day as an easy way out of the problem of economy, we may come, not long hence, to regard it as a leak in the dyke which a free people must freely combine to stop.

II. Reorganisation: the Problem of the Retarded Child

We have already referred in Part I, Section I, Chapter One, to the stage which "Hadow reorganisation" has reached in England and Wales, and a survey of the Scottish system of post-primary education is contained in Prof. McClelland's chapters in Part II, Section II. It is, however, becoming increasingly evident that the most difficult problem with which the new senior schools have to deal is that of the very wide range of attainment or lack of attainment among the pupils coming to them from the junior schools at the age of 11 *plus*. That local authorities realise this, as well as teachers, may be indicated by the following quotation from a pamphlet issued by the Stoke-on-Trent[1] Education Committee in 1931:

> "It has been definitely established that, even in the average class of children of 5 years of age, there is a mental age range of from four to

[1] We have given names of the local authorities concerned only where the information has already been published by them.

seven years. Under the present educational system, this gap widens until it is not unusual to find a mental age range of from six to eight years in an average class of children of 11 years of age."

The problem is dealt with at length in the Report of the Consultative Committee on *The Primary School*, and was emphasised in the survey of elementary education published in the last volume of the YEAR BOOK (see especially pages 172–3 and 189–90). The type of organisation adopted in senior schools to deal with the problem was also described in that survey (see especially pages 198–207).

We have made some attempt since the publication of the YEAR BOOK for 1933 to ascertain what local authorities are finding, in practice, to be the mental age range with which the senior school has to deal in providing courses for the children coming to it from the junior school. For this purpose, we made enquiries as to the distribution of children of the ages 8–9, 9–10 and 10–11 among the various classes or standards of the junior school. We are greatly indebted to Directors of Education throughout the country for much interesting information on this point, but it is clear that the information is insufficient to warrant any definite conclusions.

The reason for this is apparently that, in a number of areas, the junior schools have adopted a system of promotion by age, irrespective of attainment or ability, and it appears that, to some extent, this method of classification is encouraged by the Board of Education. But, even where this system has not been adopted, the actual organisation of the junior school does not reproduce—does not, in fact, pretend to reproduce—anything like the curves of intelligence and attainment which Prof. Burt, among others, has worked out for children between the ages of 7 and 11. In this connection we may quote the remarks of one County Director of Education of great experience:

> "In the first place, the term standard has lost to a considerable extent the clear connotation it had thirty years ago. The majority of the younger teachers would be unable to say very clearly what the attainments of Standard 2, Standard 3 or Standard 4 definitely imply. They have come to think rather in terms of years between 7 and 11. The whole tendency of junior school organisation is to bring about a flexibility quite foreign to the conception of the traditional standards which were in fact based on conventional though arbitrary attainment standards in the three R'S.
>
> "The second point is that in a large junior school with parallel classes the grading on an attainment basis is so much finer that it would be difficult to get comparable figures between conditions there and in, say, the smaller school, and certainly in the small country school. Ideally the children should be spread normally about a mean age in any one standard. This normal distribution is, however, upset immediately if teachers attempt, as in many cases they do, artificially to restrict the age distribution. Quite a number of standards would have an age range of not more than 18 months. This, of course, is artificial if the word standard has any meaning at all."

This artificial restriction of the age distribution comes out very clearly in most of the statistics which have been supplied in answer

to our enquiries. We can, perhaps, discern two broad types of age organisation.

One large northern city gives the following approximate percentages: 70 per cent of children of 8–9 years of age in Standard 2, and 15 per cent. in Standard 3, with 15 per cent. in Standard 1; 56 per cent. of children of 9–10 years of age in Standard 3, and 15 per cent. in Standard 4, with 29 per cent. in lower standards, mainly Standard 2; 60 per cent. of children of ages 10–11 years in Standard 4, and 20 per cent. in Standard 5, with 20 per cent. in lower standards, mainly Standard 3. A smaller county borough, also in the north, gives the following percentage distribution of children in the 11–12 age group (examined when about 10·6 to 11·6) who took the annual general examination in that borough in 1931: 63·6 per cent. in Standard 4, 25·6 per cent. in Standard 5 or above, and 10·8 per cent. in Standard 3 and below. These percentages may be compared with those ascertained by the county of Northumberland by an examination held in May 1932 of all children who, on August 1st of that year, would be over 11 and under 12 years of age. The examination consisted of Standardised Tests in Arithmetic and English and Intelligence Tests. Without going into details as to the classification resulting from these tests, the statistics suggest the following classification: 16·6 per cent. qualified for admission to a secondary school, 33·36 per cent. for admission to the "A stream" of the senior school, 41·7 per cent. for admission to the "B stream," and 8·34 per cent. relegated to the "C stream."

The discrepancies between these figures suggest that classification depends upon the organisation of the schools rather than upon any scientific grading of ability, but they at least agree in indicating a scattering of about 30 per cent. of the children above and below the average of their age, with not less than 10 per cent. of definite retardation. On the other hand, they contrast pretty sharply with the figures given by another great northern city which show 2,388 children of ages 8–9 in Standard 1, and 4,997 in Standard 2, with 367 in Standard 3 or above; 2,507 of ages 9–10 in Standard 2, and 4,980 in Standard 3, with 88 in Standard 1 and 495 in Standard 4 or above; 2,953 of ages 10–11 in Standard 3, and 5,653 in Standard 4, with 176 in Standard 2 or below and 791 in Standard 5 or above. This tendency for 90 per cent. of each age group to be spread over two standards, two-thirds in the higher and one-third in the lower, moving up pretty regularly year by year, with perhaps 8 per cent. of special ability above and 2 per cent. of retardation below, obviously represents a tendency to herd on all but the most obviously ailing sheep which may be traced in many areas, though not many, perhaps, show so low a percentage of retardation. The city quoted is, however, by no means alone in this respect. Thus a Greater London borough shows only 2½ per cent., another large northern city only 4 per cent., and a southern county 3 per cent.

The practical impossibility of extracting from the statistics of school organisation any reliable guide as to the numbers of children in the various grades of ability which are known to exist comes out, perhaps, most clearly where organisation is most highly developed—where the junior school has been organised in two or more " lines," " streams," or " tracks," thus seeking to reconcile promotion by age with an education suited to various grades of ability. This can, of course, only be done where schools are large, but, where it is possible, the distribution of any age group among the A, B and C classes is necessarily very largely determined by the standard size for a class. Thus a " three-way track " junior school in another Greater London borough, with three grades for each of three years, distributes its pupils among the three tracks in classes of uniform size of 48 to 50. Moreover, while the age composition of the three grades in the first and second years is mixed, grades B and C of the first year, for instance, containing 12 per cent. of the children of ages 10–11, the three grades in the third year, which aim specifically at preparing children for transition to the senior school, are composed exclusively of children between 10 and 12. The need for bringing these third-year classes approximately up to standard size, but not above it, and for preventing overcrowding in the first- and second-year classes may, therefore, tend to affect the number of definitely retarded children of 10–11 left behind in the " B " or " C " tracks of the first year. This sort of disturbance of scientific classification may, obviously, become much greater at a moment like the present, when, owing to fluctuations in the birth-rates of the past, the various age groups are of different sizes.

The same considerations apply to the classification of children when they reach the senior school. The one definite conclusion which can be drawn from our enquiries is that the amount and variety of retardation found when children enter the senior school is much greater than is being ascertained or provided for in any but a very few junior schools, and is so great that every authority which can do so aims at organising its senior schools, at any rate for the first two years, in four tracks or streams rather than in three. Incidentally, this experience may be compared with the chapter on education in Austria in this volume, where it appears that the authorities can, in general, aim in the *Hauptschule* at not more than two tracks. But, again, these four tracks have each to accommodate about forty children of the same age group. Such symmetry is clearly incompatible with the Northumberland classification given above, and the tendency of school organisation on these lines must be to treat the grading of aptitude and ability as a continuous chain which can be chopped into equal lengths, no matter what may be the precise quality of the links on either side of the point at which the cut is made. It is as easy to see the dangers of this as it is difficult to devise a remedy within the limits of the present, or indeed of any organised, school system.

III. Reorganisation: Curriculum of Junior and Senior Schools

In the survey of elementary education published in the last volume of the YEAR BOOK, emphasis was laid upon another point, the importance of securing, in at least some degree, a common syllabus for a group of junior departments or schools feeding a senior department or school. It would appear that, in general, local authorities have not found it possible to take any very definite measures to this end. It has generally been left, and perhaps wisely so at this stage, to consultations between the head teachers concerned. The following extract from a Report issued in 1930 by a sub-committee appointed by the Salford Teachers' Association may sufficiently indicate the tendencies of policy in this matter:

"From what has been said of the junior and senior schools, it follows that in order to secure the maximum development of all the children, the closest collaboration between the various schools forming a group will be of fundamental importance. To ensure continuity, it is imperative that the general scope and content of the work taken in the contributory junior schools should be well known to the senior school, while the junior school should be as intimately acquainted with the work of its infants' department. Further, the children from a number of junior schools will eventually proceed to the same senior school, and it might facilitate their further progress if the staffs of the contributory schools could agree on the adoption of specific methods of teaching the basic processes in arithmetic. Obviously, this and other equally important matters might well form subjects for discussion and agreement between the representatives of the schools in each group. We recommend, therefore, that there should be frequent consultations between staffs of the contributory and receiving departments. We suggest that the following subjects are a few of those which might, with advantage, be discussed at such conferences:

"1. The adoption of specific methods of teaching the four basic processes in arithmetic.
"2. The scope and contents of the schemes in English, geography, history, etc.
"3. The style of writing—the place of script.
"4. Provision for, and the treatment of, the backward child—co-operation between junior and senior schools.

"To ensure continuity of progress, it is desirable that the staff of a school to which a child is transferred should be acquainted immediately with his attainments and physical defects. We believe that this can best be achieved by the use of a Career Card.

"We recommend, therefore—

"1. That a career card be provided for every child.
"2. That entries be made immediately upon the child's admission to the infants' department, and at least twice during each year of his school career.
"3. That on the transfer of a child from one department or school to another, the card ought to be transferred.
"4. That the card be available to the child's class teacher."

E. P.

CHAPTER TWO

NORTHERN IRELAND

Elementary Education

FINANCIAL stringency in Northern Ireland has interfered very little in the past year with the development of the elementary schools on the lines laid down in the Education Act of 1923. No new reforms have been attempted, but the local education authorities have in the main continued their programmes of new buildings. " Provided " schools, i.e. new schools erected by the education authorities, now number 79, compared with 65 in 1931, and 33 in 1930 ; 8 other new schools are either completed or in course of construction by voluntary school managers with Government assistance. In Belfast and other towns the provided schools generally take the place of two or more existing schools under denominational management, and the roll of aided schools is further depleted by the amalgamation of adjoining schools in too close proximity in rural areas. The number of recognised public elementary schools decreased during the year by 31 and now stands at 1,832, apart from special schools for afflicted children.

The elimination of the smaller schools continues, and schools with 275 pupils or upwards increased by 14 to 138. There are 10 new " senior " schools, with places for 6,164 pupils, an increase of 1,734 places since 1931. The division into " senior " and " junior " schools is now adopted in all large urban centres when new schools are built, but no attempt has yet been made to introduce this plan of organisation into the country districts.

The enrolment of pupils reached its maximum (206,736) in 1932, but it is not expected to maintain this figure in future years owing to the declining birth-rate in the years since 1925. The increase in enrolment is confined to the older children, and the pupils in the sixth and higher standards went up from 26,795 in 1931 to 30,524 in 1932, or 14 per cent.

Transfers of voluntary schools to the control of the education authorities were 49 in 1932, bringing the number of such schools to 474. Adding to these the 79 new " provided " schools, there are now 553 schools, out of 1,832, under the control of these authorities. The enrolment in these schools represents about 42 per cent. of the entire number of elementary-school pupils in Northern Ireland ; if the 74,000 Roman Catholic pupils under voluntary management be left out of account, the proportion of pupils in authority-controlled schools is almost exactly two-thirds. When the effect of the Education Act of 1930, which made considerable concessions to religious interests, has made itself fully felt, it is very probable that few except Catholic schools will remain under voluntary control.

A new programme came into force on July 1st, 1932, but it is yet too soon to appraise its effect. It was the result of the deliberations of an expert committee which sat in 1931 ; few modifications were made in the former programme, but the tendency was to stress the teaching of English, to simplify arithmetic and at the same time to direct more attention to handwork and other practical subjects, of which horticulture has been the most successful. The number of school gardens increased by 18 in 1932 and is now 153.

The feeding of necessitous children is extending, the number of free meals supplied in 1932 having increased by 60 per cent. since the previous year. The practice, however, is still confined to three or four only of the education areas.

Secondary Education

There is little change to record in the past year, but the tendencies towards improvement shown since 1923 have continued undiminished. With assistance from the education authorities a few of the schools have been altered and improved and better equipment provided. The number of pupils entered for the Government examinations continues to increase, especially for the Senior Certificate, and the marked increase in the number taking the post-intermediate course is gratifying, although it is to be feared that it reflects in many cases the difficulty of placing pupils over 16 in employment. Attention is drawn in the official reports of the Ministry of Education to an increase in the number of pupils studying Latin without adequate success in the results. The number of well-qualified secondary teachers is again greater than in the previous year.

Technical Education

A slight falling off in numbers is ascribed to the effects of financial stress and the depressed state of industry. The total number of students has declined from 24,000 to 22,500, the decline being most evident in the classes studying domestic economy. On the other hand, full-time courses for juveniles in the junior technical schools have maintained a higher attendance. It is claimed by the Ministry of Education that the recently introduced leaving examination for pupils of these schools has reacted favourably on the work as a whole. An effort has been made to pay more attention to social life and physical games in the junior technical schools, and these influences appear to have increased their popularity and usefulness.

[*Contributed.*]

CHAPTER THREE

CANADA

THE study of education in Canada to-day must be largely a study of the effects on public education of the partial paralysis of our economic system by the deflation of recent years. The difficulty in raising money to meet educational expenditure has brought every phase of education under the anxious scrutiny not only of School Boards but of individual rate-payers, boards of trade, municipal councils and other social groups that ordinarily were content to leave problems of school administration to provincial departments of education and local boards of school trustees. Beginning with the problem of school finance, the enquiry has extended to problems of administration, types of schools, courses of study, the status of the teacher and the aims and limitations of public education. What are the essentials of a good education? How far should it be prolonged? How far should it be free and state supported?

Discussions of the Cost of Education

Some points of view may be illustrated. The President of the Manitoba School Trustees' Association says:

> "No doubt you will tell me that education is also an absolute necessity. Yes, but who is to define education? What is it to consist of and to whom is it to be given? And then again, what is a necessary education? I would go still further and ask: what education should be given free by the tax-payers? . . . The school board of which I am a member has cut out the teaching of agriculture, domestic science and manual training. We would like to cut out a lot more items on the curriculum that are looked upon as essential."

The Report of the Committee appointed by the Government of British Columbia (1932) to investigate the finances of the province quotes, apparently with approval, the statement of the May Committee on the increased cost of education in England:

> "Educational progress has been a popular plank in election platforms since the war, and we fear that a tendency has developed to regard expenditure on education as good in itself without much consideration of the results that are being obtained for it and of the limits to which it can be carried without danger to other, no less vital, national interests."

Even before the depression, the rising cost of public education had drawn comment. But it was an era of expansion and the increase in expenditure for education was more than equalled by the increase in public expenditure for provincial and municipal purposes other than education. According to the Dominion Bureau of Statistics, the total ordinary expenditure of provincial

governments in Canada increased from $53,826,219.00 in 1916 to $190,754,202.00 in 1931, an increase of 254·4 per cent. During the same period their expenditure on education rose from $9,964,552 to $34,487,613, an increase of 246 per cent. In 1931 only two items on the provincial budgets called for a greater amount than education. Interest on provincial indebtedness rose to $36,748,366 and expenditure on public buildings, roads, and works, to $36,707,703. Everybody was having a good time.

There was, however, a general feeling that the money that was being spent for education was not being spent without value received. This appeared to be confirmed by a study of the situation in the *Annual Survey of Education in Canada*, 1929. Noting that the gross expenditure on education in the nine provinces combined had risen as from 100 in 1913 to 262 in 1929, it made an estimate, based on statistics for Ontario, where the cost per pupil in elementary and secondary education may be obtained, of how far this rise in the index number from 100 to 262 would be accounted for by factors such as the change in the value of the dollar, the increased school enrolment, the higher average attendance, the difference in the proportion of pupils in elementary and secondary grades, the greater proportionate enrolment in city schools, where the cost was consistently higher than elsewhere, the higher standards of teachers, the broadening of the school curriculum and the improvement in the general level of school buildings and equipment. It concludes that, if all these factors " could be conveniently arranged and measured, it seems probable that the index would be reduced well below 100—in other words, it would be shown that the value received for money spent on education in Ontario in 1929 was greater than in the years preceding the war."

Retrenchment

To understand what is happening, some characteristics of Canadian educational systems must be borne in mind. In the first place, education is a function of the provincial governments, not of the federal government, though the latter has on several occasions given substantial aid. (See the YEAR BOOK for 1932, page 664). In the second place, public interest in the schools of the State is in Canada direct and widespread. A very small proportion of the pupils in Canadian elementary and secondary schools attend schools privately controlled and supported. Most of the provinces have state universities. It must also be borne in mind that in Canada as a whole only about 15 per cent. of the total expenditure on education is from provincial grants, though the proportion has tended to increase in recent years. More than 80 per cent. comes from various municipal sources.

School Buildings

As might be expected in the circumstances, the influence of the depression was first felt by the local educational authorities, the

boards of school trustees. The first obvious method of retrenchment was to cut down capital expenditure, and this was done. This would be more effective in urban than in rural communities, since capital expenditure is likely to be a very small percentage of the gross annual cost of schools in rural districts. And among urban centres it varies a great deal. A survey of seven towns and nine cities in Ontario showed that the percentage of gross cost on capital account in 1932 varied from nothing to 36·5 per cent. The percentage cost of instruction (salaries) tended to vary inversely. In rural schools accordingly the effect on teachers' salaries was earliest felt.

For a time it was feared that financial stringency might close considerable numbers of rural schools, but it appears that by the co-operation of departments of education, trustees, teachers and the people this has fortunately been avoided. The experience of Saskatchewan as reported by the assistant deputy minister may serve as an example.

> " If anything were needed to demonstrate the importance attached to elementary education in this province by parents and people generally, it would be amply shown in the records of school operation for 1931. As is well known, a considerable section of southern Saskatchewan suffered a comparative crop failure in 1929 and again in 1930. When a complete failure in 1931 is added to this it may be wondered how the operation of the schools in this area could be financed. Yet the tables given above show that in many respects the school year 1930–1 constituted a record. The average period of operation for all schools was 201·64 days, which was higher than in any of the three preceding years. The number of schools operating 180 days or over was 4,609 as compared with 4,526 the previous year. This is a record of achievement of which all concerned may be proud. Much of the credit must be given to the teachers who, in many cases, not only accepted drastic reductions in salary but remained at their posts even when there was no money in sight to pay salaries. The sacrifices thus made by the teachers should not be forgotten when conditions improve."

In every province expenditure on capital account, except for the most necessary items, practically ceased. Figures for 1931–2 are not available for all Canada, but some examples may be given. In Manitoba, expenditure on building for school purposes fell from $1,222,272.00 in 1930 to $795,142.00 in 1931 and to $298,958.00 in 1932. In Saskatchewan, expenditure for grounds and buildings fell from $2,022,775.00 in 1930 to $533,180.00 in 1931 ; in Alberta, from $1,565,341.00 in 1931 to $477,656.00 in 1932.

But the building of new schools did not cease. In northern Alberta, for instance, the difficulty in selling debentures was met by erecting modest buildings by voluntary contribution of labour and material from the rate-payers, with a small Government grant, $200.00 for each district, to furnish certain necessary materials. Thirty-six buildings were thus erected in 1931 and thirty-four in 1932. Similar effort is reported from other provinces. Forty-three new school districts were organised in Saskatchewan in 1932 and thirty-five in Alberta.

Current Expenses

After the retrenchment in capital expenditure came the cutting down of current expenses, chiefly teachers' salaries. For reasons noted above it affected first the teachers in rural schools. In urban communities salaries were not affected either so soon or so greatly. There, it was found, other means of retrenchment were available. In large graded schools, when a teacher retired, the number of teachers could be reduced by enlarging classes. Many trustees urged that the school age should be raised from 5 to 6 years, but, as a rule, departments of education were not convinced, though in British Columbia legislation was passed allowing school boards to exclude children under 7 years of age from school. In other cases, certain optional studies such as agriculture, household science and manual training were reduced or omitted from the curriculum. In some cases social services, e.g. medical and other health services, were curtailed, but this was not general. Night classes in vocational work were reduced in number or discontinued.

Secondary Education

In cities and towns the problem was largely one of secondary schools, particularly where vocational work had been introduced, for one effect of the depression was to increase markedly the already growing number of adolescents attending schools. The ban on capital expenditure made it increasingly difficult to accommodate these. The committee appointed by the Government of British Columbia recommended—

> " that free education be provided up to the completion of the pupil's fourteenth year, that is, up to the fourteenth anniversary of his birth. Should a pupil wish to attend high school after the completion of his fourteenth year, he should only be permitted to do so on paying fees sufficient to cover 50 per cent. of the entire cost of his education including interest and sinking fund charges on capital raised for the school building. If he desires to continue attendance at high school after the completion of his sixteenth year, he should only be permitted to do so on paying fees sufficient to cover 100 per cent. of such entire cost."

But the Government, while admitting that—

> " there may be some ground for the idea that it would tend to economy and be advantageous in other ways if a definite age-limit were fixed, beyond which the young people of the province would not be provided with schooling entirely at the public expense,"

declined to reduce the age-limit to 14 years as recommended.

A similar movement to charge fees in higher classes in Manitoba did not meet with the approval of the Legislature. To make sure that these pupils who thronged the secondary schools were profiting by the opportunity, some school boards undertook to charge fees to " repeaters," i.e. those pupils who continued at school without winning promotion or a normal amount of credits. In several cities in Saskatchewan, the school boards presented resolutions requir-

ing students, who had failed to carry a certain minimum number of courses or who were required to repeat a year, to show reason why they should be allowed to continue in the high school, or to pay fees varying from $10.00 to $25.00 a grade. This movement to charge fees for repeaters was widely discussed in other provinces, but did not become general.

The rising demand for secondary education was met to a large extent by offering greater facilities for secondary education in rural schools and through correspondence courses, especially in the western provinces. It gave an impetus also to a movement already under way to establish intermediate or junior high schools which would cost less and which would accommodate a good number of pupils who did not intend to remain at school after the age of 16, or to offer two years of secondary work in advanced classes in elementary schools. In several large urban schools in Ontario what is known as the " staggered classes " system was introduced and appears to be working effectively. Under this system a school is operated continuously from 8 or 9 a.m., to 4.20 or 5 p.m., giving from 11 to 13 periods of 40 minutes each, on a schedule offering each pupil and teacher two free periods in the middle of the day. The teacher who has a late period in the afternoon does not begin school till 9.40 in the morning, or other arrangements are made by which no teacher averages more than eight periods a day. Promotion is by subject and a time-table is arranged for each pupil. The increase in the number of teaching periods makes possible more options to the pupils. The principal of a large secondary school who, driven by circumstances, had given the system a year's trial found much to commend :

> " The criticism that the secondary schools have gone in for ' mass production ' and ' sausage machine ' methods has some foundation in fact. This scheme enables the principal and parents to consider individual needs. The student who finds language study almost impossible can be guided into other channels more easily. Again, in a large school, the groups in physical training can be made up of pupils of similar ability. The athletic boys can be given more advanced work and the slower ones will not be open to that ridicule which often causes them to hate the gymnasium period. It is my conviction that the system opens the way for experimentation which the present rigid high-school organisation makes difficult. Rather than being a make-shift for the present strenuous times, it will prove a factor in making the high school of to-morrow a better agency in educating our youth."

Teachers' Salaries

When the possibilities of other economies had been exhausted, there remained one by which at a stroke the largest economy could be effected, the reduction of salaries, for salaries constituted from about 60 per cent. of the annual expenditure of an urban school board to about 90 per cent. in smaller communities. Salaries are determined by local school boards, though in many provinces the amount has been materially affected by the schedules adopted by Teachers' Federations which function more or less effectively in

every province. There are at present no general statistics available to show the extent of the reduction in teachers' salaries since 1931. Individual instances of reductions by school boards reported in the press vary from 5 to 50 per cent., tending to vary inversely as the size of the unit of administration. In rural school districts in Saskatchewan expenditures for teachers' salaries in 1931 as compared with 1930 showed a decrease of 19 per cent.

Provinces which had a minimum salary fixed by legislation found it necessary to reduce the minimum or to allow many exceptions. In Alberta, since 1916 the law had fixed a minimum salary of $840.00 which could not be lowered except after an appeal to an Inspector. Before the influences of the depression began to be felt the number of these appeals was negligible. Even in the fall term of 1932, only 578 out of 3,249 teachers were getting below the minimum salary. The Provincial Trustees' Association this year (1933) asked that the minimum be reduced to $600. This step was not taken, but it was finally decided to suspend the minimum salary law till 1934 with the understanding that the Minister will assume the responsibility of approving agreements for a less amount whenever he is satisfied that circumstances warrant the smaller salary. In New Brunswick, where the minimum salary required by law varied from $500.00 to $700.00 according to the assessment of the district, the amount was reduced by $100.00 in each case, but the reduction was only for a year. In Ontario reductions of salaries in rural schools resulted from a measure lowering the schedule of township grants to rural schools.

The existence of a large and increasing surplus of teachers increased the temptation to lower salaries. It was no unusual thing to see newspaper reports of hundreds of teachers applying for a vacant position, and the number tended to increase from year to year as succeeding classes finished their courses at the training schools. Unemployment doubtless accounted largely for the increasing numbers thronging annually to the normal schools and teachers' colleges. In addition, a large number of ex-teachers, particularly in the western provinces, offered themselves for employment, a movement so considerable that it led teachers' federations to suggest that some test of adequacy should be applied to former teachers, long out of the service and now seeking to re-engage in it, since standards had risen in the meantime.

On the whole, public opinion has been opposed to the idea of anything more than a temporary and unavoidable reduction of salaries. Where children of all classes attend the same schools, all citizens are interested in the progress of the school and take pride in its achievements. The teacher is himself one of the community and not unwilling in a crisis to share the common burden.

Higher Standards of Proficiency for Teachers

Conditions which led to the reduction of salaries have at the same time accelerated the movement to raise the standards of pro-

ficiency. In Ontario a second year of attendance at a normal school is now required before a permanent certificate is granted, and notice has been given that the standard of admission is to be raised. After September 1935, the course for second-class teachers will be discontinued and applicants for admission to normal schools will be required to hold certificates as required at present for admission to the first-class course, the equivalent of at least a year's work beyond the junior matriculation standard.

In Nova Scotia the standards have risen steadily in recent years. Hereafter a licence to teach will represent a year's professional study together with attendance for one or more sessions at the summer school in Halifax. For the higher grade of certificate also the standard has been raised. Since 1926, training for the Superior First Rank diploma has been undertaken by the provincial universities and students have taken the courses along with their academic work as undergraduates. It was decided to terminate this arrangement in 1933 and to require henceforth a year's training after graduation. In Manitoba, where minimum requirements for a teacher's certificate call for a year's professional training, the recent Annual Report of the Deputy Minister, referring to the present requirements and the movement to raise standards of proficiency, says :

> " During the last decade, however, there has been a steadily increasing body of public opinion in favour of lengthening this period of professional training. In Manitoba it was urged that further attendance at normal schools for a period of six months, following at least one year's experience in teaching, be required. The Advisory Board finally decided that the further training of our teachers should take the form of attendance at the summer school for two summers and special professional courses have been organised to meet their needs."

In other provinces the number admitted to normal schools was fixed and reduced, and those with the highest qualifications were given the preference.

In several provinces students at training schools were called upon to pay a larger share of the cost of training. In the four western provinces the fee for the year's attendance at normal school was raised to $100.00. In Alberta the policy of provincial loans available to normal-school students was discontinued.

Administrative Problems

Relations between School Boards and Municipalities

Among the problems of administration rising into prominence as a result of the depression was that of the division of responsibility between school boards and municipal councils as to direction and financial control. As a general rule of practice at present, the amount of current expenditure on schools is determined by the local school boards but collected with other taxes by the municipality. Capital expenditure requires either the consent of the municipal

council or a vote of the rate-payers. The municipalities, called upon to raise a large proportion of taxes over which they had no control, raised the question as to whether they ought not to have a voice in fixing the rate which they were called upon to levy. It was generally felt, however, that the interests of the schools would best be cared for by leaving the responsibility where it had long been placed, in the hands of the board trustees specially appointed for that purpose. Only in one province, British Columbia, was action taken in the matter, and that was by way of a compromise. It was determined that hereafter a school board should submit estimates for ordinary expenditure to the municipal council. If the amount was deemed excessive, the board would be asked to effect a stated reduction. If a satisfactory agreement could not be reached in this way the matter was to be settled by arbitration. As a matter of practice, in all provinces there had seldom been much difficulty in reaching an agreement between the two administrative bodies, elected by and responsible to the same body of rate-payers. An example may be quoted from the report of the Superintendent of Schools for the city of Vancouver, B.C., printed in the annual report (1931–2) of the Superintendent of Education for the province:

> " It is deserving of note that, during a year marked by persistent attempts to practically abolish school boards or place school board finances, in a greater measure, under the control of local councils, ostensibly in the interests of economy, the Vancouver School Board and the City Council have co-operated 100 per cent. with each other—and not under compulsion, but gladly. For the Council's fiscal year ended December 31st, 1931, the Board, on the solicitation of the Council, reduced its estimates to a sum only $5,000 greater than the amount the Council placed in its estimates for school expenditure. The Board, however, gave its assurance that it would do its best to keep its expenditures for the year below the figure mentioned by the Council; and it is only just to point out that it did."

The Larger School Unit

The difficulty experienced by small local units in financing the schools has lent added force to the arguments for a township or county unit to replace the small rural school section. One of the recommendations of the Commission on Education which reported to the Government of New Brunswick in March 1932 was that " with a view to equalising educational opportunities and taxation for school purposes, the county be established as a unit for taxation and administration of the schools." In British Columbia the larger unit had already been adopted, the school unit corresponding with the municipal unit. In Manitoba the system was optional and had already been adopted. In Ontario bills to establish the township as a local unit for school purposes were introduced in the Legislature in 1925 and later, but apparently popular opinion in rural districts was not in favour of the measure and it was not pressed. So far as financial support is concerned township or county grants

or municipal equalisation funds have already in several provinces transferred a large share of the cost of financing rural schools to the larger unit. Instances are reported from Ontario and Manitoba, where the school section's share of the Government grants and municipal grants more than met the cost of financing the school for the year. The Report of the Minister of Education for Ontario, 1928, advocating the larger unit, quotes such an example :

> " There are almost a thousand schools—to be exact, 849—with an average attendance of 10 pupils or less, and the total cost of maintaining them is $903,913.00, so that from indications the Province will be expending at no distant date a million dollars upon schools which are far from effective and unduly expensive. The cost per pupil in them is approximately $140. In the 147 schools with five pupils or less the cost per pupil is close upon $240. Once people realise the seriousness of the situation it will be remedied. Not less extraordinary are the cases of school boards which hoard money instead of spending it on education. One Inspector thus reports : ' Many of my schools have large cash balances on hand at the end of the year. In a few cases there is more than sufficient to pay the ordinary expenses of the school for the following year. There are some schools where the township and legislative grants are more than sufficient to pay the ordinary expenses of the school.' "

Provincial Grants

In several provinces arguments have been advanced in favour of the provincial government undertaking the responsibility for a greater share of financial support. This was one of the recommendations of a committee appointed by the Premier and Minister of Education in Saskatchewan to study and report on school finance and school grants. In Ontario the Urban School Trustees' Association at its latest annual meeting voted to appoint a special committee to consider a system of education controlled by a non-political appointed commission and financed by the State rather than by municipal taxation.

Correspondence Courses

Partly, no doubt, as an effect of the depression, there has been, particularly in the western provinces, a marked extension of the functions and activities of the correspondence courses offered by the provincial departments of education. These courses had their origin in more prosperous times. That in Saskatchewan, for example, had its origin in the " Outpost Correspondence School," established in February 1925. Its enrolment consisted of children living in the outposts of settlement where population was too sparse to establish a school section, and of children physically incapacitated to attend school. By June 1930 there were 210 children under instruction in Grades I–VIII. The latest reports (1932) showed more than 600 enrolled in these grades and in addition more than 9,000 pupils in one-room schools were enrolled for subjects of Grades IX, X and XI. Lessons were received from the Government correspondence school and the pupil's

work was corrected by the teacher of the rural school. In addition, more than 1,100 were receiving full instructions from the correspondence school. For pupils taking these secondary courses where work is corrected by the teacher, a small fee of $2.00 is charged for Grades IX and X, and of $4.00 for Grade XI; for others, a fee of $15.00 for Grades IX and X, and $20.00 for Grade XI.

In Manitoba the work of the Correspondence Branch was last year (1932) extended to cover the work of Grade IX, and upwards of 500 students wrote on the Departmental examinations in that grade. As a result, 78 per cent. of the group were eligible to proceed with the full course of Grade X, "an excellent record." The Report of the Superintendent of Education for British Columbia, 1931–2, showed 355 new students registered in high-school courses (Grades IX–XII), making a total of 617 in these courses, notwithstanding the fact that fees were now being charged; for pupils 16-18 years of age fees at the rate of $1.50 per subject totalled $14.00 for the full course, for pupils 19 years or over, $3.00 per subject, making a total of $26.00 for a full-grade course. For pupils taking elementary-school work (Grades I–VIII) by correspondence, numbers increased to 1,200 in Ontario (1930–1), 768 in British Columbia (1931–2), over 800 in Alberta, (1932), and 655 in Saskatchewan (1931). In Nova Scotia an amendment (1933) to the Education Act empowers the Council of Public Instruction—

> "in school sections having fewer than ten children of school age, to make arrangements, in its discretion, for the education of such children either in another school section or through the Correspondence Study Division of the Nova Scotia Technical College; provided, however, that where such arrangements are made the organisation of the school section affected by such arrangements shall be preserved intact."

When we consider that thousands of pupils in the various provinces would otherwise have been without the opportunity of the systematic instruction thus offered, the value of this new type of public instruction must rank high. This is recognised in the Annual Report of the Saskatchewan Government Correspondence School for 1931–2.

> "The enrolment of pupils taking the courses and unable to attend any school was exceptionally heavy. No doubt the increased enrolment was somewhat due to present economic conditions, and it may be that with a return to normal times there will not be the same demand for the courses; but if there ever was a time when a Government Correspondence School was needed, it is in these days when parents are financially unable to send their children to the cities and towns to obtain a higher education. Without the Correspondence School hundreds of ambitious boys and girls in the rural parts of the province would have been debarred from those advantages in education which are available to the youth of the larger centres. The parents appreciate such assistance. Their many letters bear ample testimony to the benefits derived from the Correspondence School."

Examinations

In Canada, as elsewhere, the number and influence of examinations set by departments of education has for many years been one of the outstanding developments of public education. In 1910 the Superintendent of Education for Ontario wrote of the uniform departmental examinations of that province as " the most striking feature of our primary and secondary schools," and one which for over a quarter of a century had not only determined the character of the teaching but had held in thrall pupils, teachers and the public. The numbers writing on these examinations grew from year to year seemingly out of all proportion to the requirements for which such examinations were supposed to provide. No one, for instance, is required to write on the Ontario Lower School examination except those who are candidates for entrance to a normal school. In the normal schools, the number of entrants a year is less than 2,000, yet last year (1932) there were nearly 40,000 pupils writing on subjects of the lower-school examination. In Alberta the number of high-school pupils writing on examinations in 1932 exceeded four times the total of high-school candidates who wrote in 1922. In Saskatchewan the number of diplomas issued to successful candidates at departmental examinations for Grade XII rose from 16 in 1906 to over 1,600 in 1931.

Promotion by Recommendation of Teachers

Of recent years there has been a marked tendency to lessen the number of these examinations and to provide optional means of acquiring the same credit or certificate. For many years the regulations in Ontario have provided such a method for entrance to a high school. Local entrance boards might under certain conditions give entrance standing to candidates on the recommendations of the principal of the school without taking the written examinations of the education department. Last year nearly a third of the entrants to high schools were admitted in this way. Later the system was extended to include the lower-school examinations (Grade X) and last year for the first time middle-school standing (junior matriculation and entrance to normal schools) was offered on a similar basis. According to the report of the Minister of Education for Ontario for 1930, " the preference for written tests finds its chief support from parents and pupils who seem to have a traditional confidence in concrete results set forth in official certificates. The tendency, however, is to restrict examinations to those which are strictly necessary."

In other provinces a similar tendency is noticeable. In Saskatchewan, the Grade VIII (entrance to high school) examination set by the Department of Education has ceased to be the method of promotion. Instead the Department undertook to prepare examination tests which teachers might give their students during the month of June, the teachers to read the papers and give promotion

subject to the approval of the Inspector. The only compulsory departmental examinations remaining would be those for admission to normal schools or the university. In Alberta pupils in Grade VIII (Public School Leaving) were promoted for the first time in 1931 on the recommendations of their teachers without being required to write a departmental examination. The Department prepared papers as usual, but made the use optional with the local school authorities in each centre. In British Columbia pupils attending a public school in a district where a high or superior school is in operation are promoted on the recommendation of a committee composed of the principal of the school, the principal of the high or superior school and the provincial inspector of schools. Last year (1932) more than four-fifths of pupils who received this certificate were promoted on recommendation. In Manitoba a system of promotion for high-school entrance by recommendation instead of writing on a departmental examination came into force in 1932. Test papers in four subjects were provided by the Department but written by pupils in their own schools and marked by their teachers. On the result of these and on the approval of the Inspector certificates were issued by him. In many provinces it is still the custom for the Department to prepare examination tests, and pupils not promoted by recommendation have the option of taking these tests.

Objective Tests

As yet, objective tests play little part in examinations conducted by Canadian Departments of Education, but a beginning has been made. In Ontario in 1931, a committee appointed by the Matriculation Conference with the co-operation of the Department of Education undertook to report on how these new-type tests might be used effectively in departmental examinations. Tests were conducted by sending new-type test papers in certain subjects to a large number of high schools and comparing the relative standing of pupils (*a*) on these tests, (*b*) on teacher's tests of sessional work and (*c*) on the departmental examinations on which these pupils would write a month or so later. The results of the experiment were published by the Department of Education. Types of objective tests designed for Canadian Schools are now in course of preparation by the Department of Educational Research established in the Ontario College of Education in 1931. In several of the western provinces objective tests have been used to a limited extent in the last few years in connection with departmental examination papers.

Compensating Benefits of the Depression

That the difficult conditions that have prevailed for the last three years have given rise to compensating factors is noted in the Annual Report of the Chief Inspector of Schools for Alberta, 1932.

" Lessons in economy have been learned from a hard taskmaster, better values sought in material and spiritual things, closer relationships established between home, community and school.

" There are certain particulars in which substantial progress was in evidence during the past year in spite of set-backs. Briefly these are :

(1) A general tendency to extend the period of operation.

(2) An improved percentage of attendance.

(3) An increased demand everywhere for advanced instruction.

(4) A distinct improvement in the quality of the instruction afforded.

(5) Better teaching conditions, more permanency of tenure, improvement in the academic and professional qualifications of teachers.

(6) Greater emphasis on health and the physical well-being of the children."

Discussions with regard to courses of study centred about three topics : that the number of subjects should be reduced and more stress laid on fundamental subjects, that there should be more practical work, and that more attention should be paid to subjects that would prepare the pupil for citizenship in an age when social and economic questions, national and international, were of great and increasing importance. The first topic was not new and, in view of the difficulty of getting anything like unanimous opinion as to what are essential subjects and what are " fads and frills," discussion of the topic is not likely to have more effect than usual. The second appeared to stress manual and vocational work and that tendency was already active. The third topic, presenting arguments in favour of the introduction of some study of economic and social problems in all schools where pupils are sufficiently advanced, seems most likely to offer constructive suggestions to the curriculum maker of the future.

W. E. MACPHERSON.

CHAPTER FOUR

AUSTRALIA

I. Australian Education and the Depression

The Financial Crisis

TO the student of finance and economics the history of Australia during the last three years is particularly interesting. It is generally agreed that the effects of the present world-wide depression were felt in Australia at an earlier stage than in most other countries. Australia's extensive borrowings, chiefly for development purposes, her dependence on overseas markets for the disposal of her primary production and her unfavourable trade balance placed her in a particularly vulnerable position in any general economic disturbance.

It is also generally agreed that, in spite of a few incidents and periods which gave rise to uneasiness, Australia has been one of the first countries to set her house in order, so that nothing is now needed for her complete rehabilitation except a return of world confidence and stability. In 1929 the accumulated State and Federal deficits reached a total of £41,000,000. It is estimated that, if stringent measures had not been taken, the deficits at the present time would have reached the sum of £80,000,000. The actual financial position at the end of June 1933 shows a Commonwealth credit balance of approximately £4,000,000, while total State deficits amount to £9,000,000. This achievement is all the more remarkable when it is realised that the estimated national income fell from £650,000,000 in 1928 to £385,000,000 in 1932.

The outstanding factor in this adjustment was the adoption of what is known as the *Premier's Plan*. To a large extent this plan was the outcome of recommendations made by economists and financial experts. The essence of the plan was the progressive reduction of deficits. This was to be brought about through decreased expenditure, increased taxation and currency management.

Educational Machinery

As has been pointed out in previous issues of the YEAR BOOK, the grants for education in the various Australian States are made from State revenues. There is no direct taxation for education as such, nor are the funds voted from general revenue allotted to local authorities for detailed distribution. All State expenditures on education, apart from grants to the six universities and to a few other bodies, are controlled by the State Education Departments. In each State a Minister for Education is appointed by the Government of the day. The Minister's duty is to exercise control over educational expenditure, to carry out the decisions of the Govern-

ment with regard to educational policies and to act as a link between the Cabinet and the State Department of Education.

The arrangement just described lends itself very readily to the carrying out of economies in education. All that is necessary is for the Government in power to instruct the officials of the Education Department, through the Minister, that their grant for the year is to be reduced by such and such an amount. In practice, of course, the Government has to give consideration to the possibility of making savings in various directions without serious damage to the educational structure, and without arousing public resentment with its political reverberations, but, as compared with a decentralised system, there is no question of convincing or consulting local education authorities. If we assume that the provision of school funds by means of specific educational taxes, rates or loans, either local or general, gives a more accurate reflection of what the people as a whole are prepared to spend on their schools than does the Australian method, it may well be that systems like those in the Australian States, which meet all educational expenditure from general revenue, may go even farther than the community desires in making reductions in times requiring economy. It is at least certain that at such times the large taxpaying interests, which are not likely in a time of financial stress to show much concern for the schools or the people, will bring severe pressure to bear in the attempt to reduce expenditure in various Government departments.

There is, however, another side to the picture. A large and centralised Government Department of Education with full control of all educational activities and expenditures can arrange for its economies to be carried out in such a way that the burden is spread equally over all schools and districts. Reports from the United States indicate that in some of the less favoured areas of that country the reductions in educational facilities are nothing less than tragic. In England, the existence of many authorities must surely make it difficult to secure the adoption of a uniform policy and to eliminate unnecessary and expensive overlapping. For example, Lancashire has forty-six independent rating authorities and forty-six directors of education. In some areas the primary schools are under one authority and the secondary schools of the same area are under another authority.

Effect of the Premier's Plan on Education

Under the Plan already referred to, the various State Governments naturally turned to their respective Education Departments in order to reduce expenditure. In the financial year 1929–30 State expenditures in Australia amounted to £122,812,235. Of this amount £11,729,480 was spent on education.[1] Leaving out

[1] These figures, taken from page 274 of the *Commonwealth Year Book* for 1931, do not show the same total expenditure as is given for 1929-30 in the detailed table which follows. It is probable that the *Year Book* figure covers only the expenditure of the State Education Departments and does not include grants to universities.

payments made on account of public debts, the only single item which exceeded education was the expenditure on the State-owned railways.

The following table shows the reductions which have been effected in educational expenditure by each State during the last three years for which figures are available:

	Total State Expenditure on Education (including Buildings)			*Reduction in Total*
	1929	1930	1931	1929–31
	£	£	£	*Percentage*
New South Wales [1]	5,410,347	4,833,727	4,553,543	16
Queensland . .	1,844,372	1,777,888	1,507,128	19
South Australia [2] .	1,088,412	1,050,665	917,233	16
Tasmania . .	327,012	319,797	258,525	21
	1929–30	1930–1	1931–2	1929–30 *to* 1931–2
	£	£	£	*Percentage*
Victoria . .	3,346,947	3,014,632	2,574,459	23
Western Australia .	814,829	752,047	599,739	26
All States . .	12,831,919	11,748,756	10,410,627	19

The foregoing table shows that very substantial savings have been made in educational expenditure during the period under review. The figures for 1932, where available, indicate still further reductions for that year, but it is reasonable to suppose that, unless there is some serious and unforeseen setback to the financial recovery of Australia, the curve of expenditure will not drop any lower than in 1932.

It is impossible that reductions of 20 per cent. and over could be carried out without serious sacrifices on the part of individuals and without some curtailment of educational facilities. In estimating the extent of the damage we must know something of the standards which had been reached before the economies were put into operation. Although the *per capita* expenditure on education in Australia had risen steadily for the last fifteen or twenty years it had not reached the level of the most advanced countries in other parts of the world. This point is dealt with in greater detail on a later page. It would be incorrect to attribute this state of affairs solely to lack of public interest in education. Australian public opinion may not always be sufficiently aware of how its standards in school buildings, in equipment, in libraries and in facilities for higher education compare with those in other countries. But apart from a minority of conservatives who more or less openly believe in one type of education for the classes and another for the masses, general public opinion holds that nothing but the best in education

[1] The estimated expenditure for New South Wales for the year ending June 1933 represents a reduction of 19 per cent. from the 1929 figures.

[2] The figures for South Australia for 1930 and 1931 include provision for sinking fund of £6,225 and £7,044 respectively. The total expenditure for 1932 shows a reduction of 23 per cent. over the 1929 figures.

is good enough for Australian youth. It must be remembered that Australia has been faced with the enormous task of developing the natural resources of a not-too-kindly continent with but a handful of people to bear the cost of roads, bridges, railways, harbours and irrigation schemes. It can safely be said that no other country during the corresponding stage of its economic history has approached it in the provision of educational facilities. It is also safe to assert that few countries get better value for their educational expenditure. The absence of overlapping and the efficiency which is associated with unified control eliminate sources of waste which operate in many other countries.

School Buildings

As would be expected, there has been a considerable reduction in the expenditure on buildings during the last three years. The actual decrease is shown in the following table. The figures cover expenditure on buildings used for primary, secondary and technical education.

	Expenditure on School Buildings		
	1929	1930	1931
	£	£	£
New South Wales . . .	786,305	503,437	349,196
Queensland	137,199	117,890	44,383
South Australia . . .	111,495	68,187	22,946
Tasmania	32,951	22,398	3,926
	1929–30	1930–1	1931–2
	£	£	£
Victoria	399,736	128,946	45,743
Western Australia . . .	65,440	25,064	10,598
Totals . . .	1,533,126	865,922	476,792

It will be noticed that the decrease in expenditure on buildings varies from 50 to almost 90 per cent. It can safely be assumed that almost all expenditure on buildings during the last two years or so has been limited to upkeep and to the making of essential repairs. Indeed, information from some of the States suggests that even urgent needs along these lines have, at times, not been met. In some respects a halt in building activities is the least damaging form which economies can take ; but it has one particularly unfortunate aspect. Building costs at the present time are lower than they have been for many years. They will certainly increase with a return of general prosperity. To postpone essential building projects until the return of better times is thus, in one respect, a penny-wise pound-foolish policy. Perhaps in the early years of the depression such a policy was unavoidable, but it is to be feared that the old story will be repeated again and that the education departments will find themselves faced with heavy building programmes at times of high building costs. This will be especially true if Australia is to keep pace with the tendency in other parts of the world and decides to raise the school-leaving age above 14 years. The difficulty in

bringing about the adoption of long-range policies in such matters is that the final decisions are not in the hands of the permanent professional officers who have made a close study of local educational needs and of developments in other parts of the world. The Cabinet Ministers who control the public purse, and thus the expenditure on schools, cannot as a rule be expected to have any specialised knowledge of educational tendencies, and, moreover, under the party system cannot always take the long rather than the short view without running risks of committing political suicide.

Teachers' Salaries

In common with other members of the State public services all teachers have had to accept substantial reductions in salary. These decreases have taken the form of percentage deductions. In some States a uniform percentage has been applied to all ranges of salary, in other States the reductions have varied according to salary. For example, in Western Australia the salaries in operation in June 1932 represented a reduction of 18 per cent. on salaries up to £250 and 20 per cent. on salaries over that amount when compared with the figures for the 1928-9 period. The salaries paid in New South Wales in December 1932 represent a reduction ranging from 15 to 32 per cent. on the figures for 1930. The Queensland reductions range from 15 to 18½ per cent. In Victoria the reductions vary from 6 per cent. on salaries of £50 (paid to junior teachers) to 21 per cent. on £750 (the highest salaries for teachers in charge of schools). Tasmania and South Australia have introduced all-round reductions of 20 per cent.

There are minor variations in the methods adopted in the different States for classifying and promoting teachers. In all States it is the practice to place each teacher in one of several grades or classes. Teachers are promoted from one grade to another on the basis of their length of experience, their efficiency as indicated by inspectors' reports and their academic or professional qualifications. In some States the number of positions in each class is defined and a higher classification can be achieved only by appointment to a position carrying greater responsibility. In other States it is possible for a teacher to receive higher classification without leaving the position already occupied. In all States, however, it is the practice to have a range of salary for the teachers in any given class. On being first classified, or on being promoted to a higher class, the teacher starts at the minimum for that class and proceeds by annual increments to the maximum. He stays on this maximum until promoted to a higher class, where the same process is repeated. In some States the increments are automatic or almost so, while in other States they are withheld if the inspector's reports are unsatisfactory. In one State as many as one-fifth of the increments which would normally have been received by teachers in the lowest class have been withheld in a given year.

Since the onset of the depression promotions to higher classes

have greatly decreased in number. In several of the States increments within the class have been reduced. In Tasmania and Queensland such automatic increases have ceased for the time being, but this action has been taken on the understanding that, when reintroduced, each teacher will be paid at the rate he would have received if no cessation had taken place. Reductions have also been made in other allowances such as the allowances paid to teachers in remote schools, allowances to demonstration teachers, travelling allowances for inspectors and teachers, and house allowances for teachers where there is no school residence. The situation varies from State to State according to the existing custom of granting such allowances and according to the ease with which alterations could be made.

Victorian teachers claim that they have been unfairly treated in the matter of promotions. The 1925 Education Act defined the number of positions in each class. The normal procedure when a position becomes vacant is to appoint to it a teacher from the class below by selection of some applicant from the list of eligible teachers who have been placed on the published list, known as the "Promotion List." From August 1930 to the time of writing some 433 positions have become vacant, but only 129 teachers have been appointed to them. The result is that about 300 teachers have been deprived of promotion, though in many cases they have been called on to carry out the duties of the higher position. The Government has recently introduced an amended regulation altering the scheme for the staffing of schools. The teachers claim that this will have the effect of defeating the Act by automatically decreasing the number of higher positions.

Reductions in teachers' salaries and allowances contribute more than any other item to the savings indicated in the table on page 296. Although in most States building and maintenance costs have been cut more heavily than salaries, the salary bill is easily the largest item in the cost of education. To take one example, we find in comparing the Queensland figures for 1929 and 1931 that there was a saving of £143,388 in salaries and allowances and a saving of £97,689 on buildings, furnishings and repairs.

The decreased remuneration of teachers has been offset to a considerable extent by the decreased cost of living. Based on the figures for the six capital cities, the drop between 1930 and 1932 in cost of living amounted to about 18 per cent., whereas reductions in salary average about 20 per cent.[1] On the other hand, it must be remembered that, like other members of the community, teachers have had to meet greatly increased taxation, and that, particularly in the lower ranges of salary paid by the Departments, a married man with a family found it difficult enough

[1] It is interesting to note in a history of Tasmanian education which is in course of preparation by Mr. C. Reeves that in 1861 the salaries of Tasmanian teachers were reduced by 20 per cent. on account of the economic depression then in evidence.

to meet his obligations even before any reductions were made.

Australian teachers have in the main accepted the reductions in their incomes in a praiseworthy spirit. The security of tenure enjoyed by the Australian teacher, the realisation that in such times he is fortunate to have a regular even if a decreased income, and the knowledge that all his fellow-teachers share equally in the burden are factors which assist him in accepting decreased remuneration in a spirit of equanimity. He holds very strongly, however, to the view that the reductions should last no longer than is absolutely necessary. The responsible officers of the various Education Departments speak enthusiastically of the way in which the teachers have risen to the occasion and have in many cases shouldered additional responsibilities. Not only have heavier teaching duties been undertaken cheerfully, but, as will be shown later, some remarkably fine voluntary efforts are being carried out by the teachers. It should not be forgotten that the chief administrative officers of the Education Departments have not merely had reductions of salary to the maximum degree in operation in the State concerned, but have had to bear the heavy additional burdens of responsibility and worry in the attempt to carry out the economies required by the State Governments with as little damage as possible to the educational structure. Their task has been an extremely difficult and unenviable one.

Effect on Educational Facilities

With minor exceptions educational facilities have not been reduced. In two or three of the States the raising of the minimum attendance requirement has resulted in the closing of a few schools where there were less than ten pupils. When this takes place the children concerned are usually taught by correspondence. For a while New South Wales had to restrict the attendance of children under 6 years on account of shortage of accommodation. Queensland has found it necessary to suspend the use of four specially built travelling schools which were used to provide manual and domestic training for children in distant railway centres.

So far as educational facilities for children over 14 years are concerned, restriction, as a rule, has taken forms other than the closing of secondary schools or abolition of classes. It has taken the form either of raising fees, of imposing fees where no fees were formerly charged, or of reducing the number of free places. For example, Victoria now charges high-school pupils a fee varying from £3 to £12 a year according to the year of attendance. In certain circumstances the fees are payable by children under 14 years of age. The fee formerly charged was a uniform £6 per year, which did not apply in any case to children of less than 14 years. Tasmania has introduced a fee of £1 a term for high-school students under the statutory leaving age, and £1 10*s.* 0*d.* a term for those over this age. Western Australia made a 20 per cent. reduction in the number of scholarships to secondary schools.

Queensland reduced scholarships, but has now restored them. New South Wales reduced the number of bursaries, but still has a liberal allowance. In at least three States there has been a decrease in the number of students entering high schools. It might be argued, therefore, that the changes referred to above have removed Australia a little farther than before from the ideal of secondary education—in one form or another—for all. The exigencies of the situation have lent support to the fairly general view amongst taxpayers that secondary education is a privilege which should be paid for, and to the concept, still common amongst educationists, that secondary education is primarily if not solely the prerogative of the intellectual aristocracy.

The total school enrolments in the latest annual reports show an increase over the previous year in all States except South Australia, where there is a decrease of approximately 1,500. The total increase in the other States amounts to 18,300. New South Wales accounts for nearly 10,000 of this increase, though still more recent information from that State suggests that the peak of enrolment has been passed. There has been a steady growth in recent years in the number of children receiving correspondence tuition. The latest numbers given by the Departments show a total of 15,375 as compared with 13,284 in 1930.[1]

Medical and Dental Services

Some of the Departments have made reductions in the provision of medical and dental services. Queensland has curtailed medical services somewhat, but has kept dental services at full strength. Tasmania has even gone so far as to abolish both forms of service. The necessity for these restrictions is much to be deplored, partly because of the increased need for free medical advice in time of economic depression and partly because the provision of such services in Australia is well below the standard attained in some other parts of the world. It would seem that the ultimate economic advantage to the State would repay the cost of a thoroughgoing system of medical inspection and treatment during childhood.

Special Classes and Schools

The pressing need for statesmanlike action with regard to the detection and treatment of mental defect in various forms and degrees is obvious to all who have had the courage to look frankly into the situation. Fortunately most of the States have been able to retain whatever special provisions have been made for such cases. One regrettable step was the closing about two years ago of the Psychological Clinic in Western Australia. Tasmania is now the only State with a Government clinic. On the whole, Australia is not doing more than touch the fringe of the problem of mental deficiency. There is in the whole country no residential institution

[1] See *Primary Education by Correspondence*: Educational Research Series No. 3. Melbourne University Press.

where suitable adult cases can be permanently cared for and provided with a wide range of occupations suited to the capabilities of the inmates. Experience in England and America has shown that such an institution can be almost if not quite self-supporting. Further than this, if run on suitable lines, it is possible to provide a far happier environment for most of the inmates than would otherwise fall to their lot. People interested in the growing menace of mental deficiency have been hoping for years that there will eventually arise State Governments which will have the courage to attack the problem seriously.

Most of the State Education Departments have recognised the problem of making at least some provision for cases of deficiency amongst the school population. New South Wales has at Glenfield, near Sydney, an excellent residential school for children who are of poor mentality. Victoria, in addition to a residential school and two special schools for mentally deficient children, now has about fifty "Opportunity" classes for children who are backward rather than mentally deficient. South Australia has sixteen such classes, and several other States have made a commencement in establishing them. Tasmania and South Australia have appointed specially trained officers as supervisors of special schools and grades. There can be little doubt that the effect of the depression has been to hold up developments in the provision of special education. In the circumstances it is a cause for congratulation that not much ground has been lost.

A full investigation of the relationship between mental defects of various types and crime, industrial inefficiency, disease and pauperism would probably show that, even on the economic plane, a thoroughgoing attack on the situation would be justified.

Supply of Teachers

In some parts of the world education economies are achieved by the dismissal of teachers. This cannot happen in Australia except in the case of certain groups such as temporary teachers. A general increase in school enrolments has been accompanied by slight increases of teaching personnel in some States and slight decreases in others. The relative proportion of permanent and temporary teachers has probably altered. In Victoria, for example, the services of many temporary teachers were discontinued in 1931. Under the legislation of that State a woman on marriage must resign from her position as a permanent teacher. A number of the temporary teachers were former permanent teachers who had resigned on marriage and had later received temporary positions in the Department when the death of their husband or some similar cause made it necessary for them to become wage-earners again.

Training of Teachers

In all States there have been curtailments in the number of students admitted to the Teachers' Colleges. Victoria has closed

her two provincial Colleges and even then the College at Melbourne has only about half the number of students which it had a few years ago. Western Australia has temporarily closed her one Teachers' College. South Australia has reduced the teaching staff of its College by 14 per cent. and admitted no new students in 1932. Tasmania has made a large reduction in number of students and a 20 per cent. reduction in teaching staff. In New South Wales the total number of students admitted to the Teachers' Colleges at Sydney and Armidale in 1929 was 755. The corresponding figure for 1932 was 251 and for 1933 it was 350.

These restrictions in training of teachers are to some extent economy measures, but they have been made possible by the fact that there is no shortage of teachers at the present time. In fact, some States are finding it difficult to place their students on completion of training. This falling off of demand for teachers is attributable partly to the decrease in number of promotions and new positions and partly to the smaller number of resignations from the service. For example, when we compare the resignations in Victoria for 1927 and 1932 we find that, in the case of classified teachers, the numbers dropped from 330 to 240, and, in the case of junior teachers, from 231 to 106. If women alone are taken into account, the number of resignations dropped from 201 to 155.

It is difficult to accept this reduction in training with complete equanimity. The present staffing of Australian schools cannot be regarded as satisfactory if it is agreed that every class in every school should be under the charge of a fully trained teacher. Under various titles, such as junior teachers, temporary teachers, uncertificated teachers, probationary teachers, monitors, pupil teachers, teacher scholars and provisional teachers, each of the States employs some teachers whose training and qualifications are not sufficiently complete for them to receive full classification. Some of the teachers in these groups are not in charge of classes or of schools, but, on the other hand, many of them have partial or full teaching responsibility. An examination of the latest figures for all States shows that, out of a total teaching personnel of about 28,250, approximately 7,500 are unclassified teachers falling into one or other of the categories above-named. If we were to deduct from these totals the figures for teachers in secondary schools we should reduce the former figure in a much greater proportion than the latter, since few teachers without full classification are employed in high schools. We may, then, hazard the guess that in the primary schools one child out of every four is for some or all of the time under instruction from a teacher who has not reached full professional status in the eyes of his own department. The employment of none but fully qualified and classified teachers would result in considerable increases in educational costs, but in normal times public opinion could probably be brought to see the desirability of attaining this standard.

There will be no real solution to the problem until teachers'

salaries are sufficiently high in comparison with the rewards in other professions to attract and retain persons of professional capacity. In spite of the present reductions in teachers' salaries, many well-qualified applicants are offering themselves for the comparatively few studentships in the teachers' colleges. This is obviously due to the absence of openings in other walks of professional life for those who have received a good general education at the university or elsewhere.

The present situation offers an excellent opportunity for recruiting very desirable talent into the teaching profession, and for raising the standards and qualifications of those already employed. It is to be feared that the opportunity is not being taken. It would of course be an illusion to suppose that the present demand for entrance into the profession by highly qualified persons will continue after the passing of the depression, or that the services of such persons will be retained unless the increase of remuneration for teachers departs from its usual custom of lagging behind rewards in other walks of life.

Most of the Australian States still retain one-year courses at their Teachers' Colleges for certain students, while some States provide only the one-year course for the great majority of their future elementary-school teachers.[1] The present good supply of teachers would have given an excellent opportunity for abolishing one-year courses if the demands for economy had not been so very insistent.

Character of Teachers' Colleges

The diminution in number of students in training, and particularly the closing of certain colleges, gives cause for regret in another direction. These colleges are capable of contributing to State education in Australia qualities of a very valuable kind. The best of the colleges have built up traditions which give them something of that intangible and subtle quality associated characteristically with the great public schools of England. They develop comradeship, attachment to a code of honour, capacity for corporate living, enthusiasm for a cause, tolerance, and, in the conduct of student affairs, provide invaluable opportunities for the acceptance of real responsibility. Each college has its own particular quality or "flavour" arising from its accumulated traditions and the personality of the principal and his staff. A true college "atmosphere" is a delicate growth which requires nurture over a number of years. There is no need to enlarge on the peculiar value of good Teachers' Colleges to systems of education such as are found in the Australian States where, if there is any serious danger to be kept in mind, it is the danger of over-mechanisation, of over-stress

[1] This one year is, of course, additional to any training received as a junior or probationary teacher. In some States such teachers are required to do systematic study under the supervision of the head teacher of the school to which they are attached.

on uniformity and conformity to prescribed routine. A good college with a large element of autonomy in its administration gives the student during vital years a chance of developing an appreciation of those personal values and qualities which are so difficult to cater for in the working of any large-scale machinery.

Libraries, Teaching Materials, etc.

The depression has naturally affected the supply of books and materials. The usual practice in the Australian States is to supply essential equipment only. Library books, pictures, etc., are usually purchased from locally raised funds. At ordinary times it is a common practice to subsidise such funds on a £1 for £1 basis. Textbooks are normally paid for by parents. New South Wales has in the past been more generous than most of the other States in the matter of supplying free textbooks and free equipment. The cost of such supplies in New South Wales was reduced from £77,230 in 1929–30 to £28,500 in 193–23. Instead of being supplied free, textbooks are now made available to schools at cost price for purchase by the scholars.

The necessity for restricting aid to schools which are seeking to establish libraries is most unfortunate, since, on the average, Australian school libraries leave very much to be desired. The restrictions on the supply of books and the need for avoiding calls on the parent make it difficult to put into operation new methods of instruction, or courses of study, which depend on the supply of such materials. Many teachers would probably be prepared to introduce individual methods of instruction in certain subjects if pupils could be supplied with the necessary materials and with the individual work books which one finds in a large number of American schools. Unfortunately progress in educational method cannot be divorced altogether from the provision of material aids.

Comparative Costs of Education

In considering the general effect of the economies detailed in the foregoing sections we must take into account the standard of expenditure attained in Australia as compared with other parts of the world. We may best do this by examining the cost per child.

State	*Total*	*Cost per Child (Average Attendance)*
	£	£ s. d.
New South Wales . .	3,996,517	12 12 10
Victoria . . .	2,445,861	11 9 7
Queensland . . .	1,514,456	13 2 9
South Australia . .	792,981	10 2 0
Western Australia . .	648,508	12 11 4
Tasmania . . .	269,764	9 3 6
Northern Territory .	5,626	31 19 4
Total . . .	9,673,713	12 1 4

The above table taken from the *Commonwealth Year Book* for 1932 gives the figures for the year 1930 for all schools, excluding senior technical schools. We may take these figures as representing, in the main, the starting-point from which economies have been effected.

In the present condition of educational statistics it is difficult, if not impossible, to make completely reliable comparisons between countries. The following figures taken from an article by G. Morris in *The Journal of Education* for March 1933 are, however, sufficient to show that the Australian standards of expenditure before the depression were certainly not extravagant: [1]

America: Average cost per pupil (1929–30)
(*a*) Public elementary schools £15 15*s*. 6*d*.
(*b*) Public high schools £33 11*s*. 0*d*.

England and Wales: Average cost per pupil
(*a*) Elementary £12 11*s*. 7*d*. (1932).
(*b*) Secondary £28 18*s*. 0*d*. (1930).

It is important to remember also that Australia has an unusually large proportion of small one-teacher schools which are necessarily more costly per pupil than are city schools.

The table given above indicates that the Australian States which have made the most drastic reductions are in some cases the ones which can least afford to do so. This applies particularly to Tasmania, where the expenditure per head is easily the lowest of all States.

In general we must conclude that the reductions in educational expenditure which have been forced on the Governments in Australia by the depression have been most unfortunate. Although the Australian systems of education lend themselves to the making of rational economies which, because spread over a wide area, do not fall with undue severity on certain schools or certain districts only, there can be no doubt that educational progress has been retarded and that, in some respects at least, ground has definitely been lost.

The Depression and Educational Administration

There is evidence that in some States political control is tending to encroach on the administrative authority of the professional officers of the Education Departments. It is to be feared that the effect of the depression has been to encourage this tendency. The necessity for achieving reductions in expenditure has brought to the attention of the Minister and the Cabinet matters which a few years ago would have been decided by the administrative officers. For example, it is a matter of common knowledge in Victoria that new courses of instruction which the professional officers desired

[1] See diagram on page 171 for comparisons on a different basis.

to introduce were held up for many months because the Minister of the day refused to give his authorisation. It would appear that the general public has to some extent come to regard the Minister rather than the Director and his assistants as the administrative authority. A deputation recently approached the Victorian Minister to ask that the time spent by children in receiving treatment at a dental clinic should be counted as school attendance. To decide such questions would appear to be entirely outside the proper function of the Minister unless for some reason or other the professional officers feel it desirable to consult him.

Most Australian Ministers of Education have realised the impossibility of mastering, in the space of time represented by the average term of office of a Government, the intricate details of administration or the technicalities of modern education. There has been also a gratifying absence of attempts to use the schools for political purposes. Teachers and administrative officers are always appointed for life and are thus never penalised on account of their political affiliations. In spite of these facts there would appear to be an element of danger in the present arrangement, a danger that administrative officers will not be given the freedom of action which is essential to vigorous, impartial and progressive administration. One fails to see why the permanent head of an education department should, for example, have much less freedom of action than the head of a State railway department, and yet this is true in more than one Australian State at the present time.

As pointed out by Mr. Tate in the YEAR BOOK for 1933, the educational economies introduced by the government of the day in a previous time of depression had most unfortunate consequences which lasted for years after the depression had passed. It is indeed a question whether the Australian system does not place the schools in a position which renders them rather too accessible to interference from the Government of the day. Apart from an alteration of the system, one of the chief safeguards is an educated public opinion. The chief difficulty here is that anyone who seeks to stir up a healthy dissatisfaction with things as they are runs the risk of being regarded either as disloyal to his superiors or as animated by self-interest. Fortunately there are numerous evidences that the general public is taking more interest in the work of the schools. This is being accomplished chiefly by the introduction of educational movements which cause the school work and school interests to burst the narrow boundaries of the class-room and impinge at many points on the life of the community.

An unfortunate effect of the depression is the increased difficulty of arranging for administrative officers to go abroad for the making of educational observations. Even in better times the Ministries in power have often failed to realise that this is a vital matter. At the last Imperial Education Conference the only Australian States represented were Victoria, New South Wales and South Australia. Only a small minority of the senior administrative

officers have had the advantage of travel abroad. It is probably correct to say that, at the present time, there are some States in which not one of the senior officers has been outside Australia. There have been few cases of exchange of teachers and, so far as is known, no exchanges of inspectors between the various States.

Fortunately the position is much better than it would otherwise have been through the action of the Carnegie Corporation in making seven or eight grants in the last three years to enable Australian educationists to carry out observations abroad. As a result very direct benefits to Australian education have already made themselves felt. Several of the grants have been received by officers in administrative positions and the remainder have gone to persons holding responsible positions in the universities and teachers' colleges.

It is obvious that if Australia is to keep up with educational developments abroad definite steps must be taken to overcome the disadvantage of her remoteness from other parts of the world, a disadvantage which is accentuated by the fact that a centralised administration almost inevitably leads to uniformity in educational methods. No stimulus can quite replace the beneficial shock which comes from seeing in operation methods of education which, even though totally different from those which the observer has possibly come to regard as infallible or inevitable, may yet appear to achieve an equal or even a greater degree of success. It is surely not Utopian to suggest that every newly appointed inspector of schools should be enabled, if not required, to go abroad for at least six months before he takes up his new duties.

Relief Work by the Schools

In all States fine work has been done by voluntary bodies and by school staffs in the unobtrusive relief of cases of distress amongst school children. It would be difficult to find anywhere a better example of such work than that carried out by the State School Relief Committee of Victoria. It is worthy of note that this organisation was well under way before departmental or governmental officials heard about it. One could not desire better evidence that initiative, team-work and a strong spirit of social service *can* exist in a centralised educational system.

In the early part of 1930 the East Kew State School, situated in a residential district, provided food and other supplies for necessitous cases in a school in one of the industrial areas. Before long two other schools offered to help. This brought the whole question of the relief of distress before the Victorian Teachers' Union. The matter was handed over for consideration to the Head Teachers' Branch of that association. The result was the organisation of the State School Relief Committee in June 1930. The first step taken was to circularise schools in Melbourne. Each school was asked to state whether it could assist another school, whether it could do no more than look after its own cases of want, or whether it required help. According to the replies, schools were classified as A, B or

C respectively. The first approach brought replies from 105 schools, of which 20 were in Class A, 65 in Class B and 20 in Class C. Each of the 20 C schools was allotted to the care of a particular school in Class A. Parents contributed eatables and clothing, children raised money by penny concerts and in other ways. Scores of children in several of the city high schools took two lunches instead of one to school every day. The extra lunches were systematically collected in the morning and delivered direct to several schools in the poorer areas of the city.

Soon after the scheme had been launched it was brought to the notice of the Education Department, which gave its full support and encouragement. At the request of the Minister of Sustenance the scheme was extended to embrace the whole of Victoria. The A, B, C scheme worked very well during the first two years. As city schools dropped out of Class A on account of the spread of distress, country schools and inspectorates came in and took their places in sending goods and clothing to the needy schools. But by the end of 1931 the school to school scheme was found to have outlived its usefulness, and a central depot was established. At this stage also contributions of money were invited to form a central fund. It is impossible to detail the amount or even all the forms of assistance which have been given by the Relief Committee and other agencies with which it has co-operated. Between 8,000 and 9,000 new garments have been made and issued, apart from some 20,000 other articles of clothing, over 40 sides of leather have been supplied for mending boots, this winter 1,000 children are receiving a daily hot meal and some 7,000 are to receive half a pint of milk each day for four or five months. From 10 to 14 tons of paper used on one side has been collected from Government and private offices and made into writing-pads for the use of children. One teacher has devoted his Saturday mornings and school holidays to the task of collecting this paper in his car. The paper has been cut and made into writing-pads by employees at the Government printing office in their own time.

The Relief Committee is proud to be able to say that not a single case of distress brought to its notice has gone unrelieved. Although accurate estimates are impossible, the value of the goods and services supplied through the Committee possibly totals £50,000. This does not include the value of the aid given in schools which look after their own cases of need. The monetary equivalent of these services may, perhaps, reach a somewhat similar figure. Yet all this work has been done without cost to the Education Department. The whole of the work of organisation, the whole of the clerical work, has been voluntarily carried out by teachers who have continued to perform their ordinary teaching duties on greatly reduced salaries.

It may not be superfluous to point out the value of this relief work to the thousands of children who have participated in the unselfish efforts to help others. Practical citizenship of this kind is

worth more than all the theoretical lessons in the subject. School and home have been brought closer together. Parents have received a liberal education in neighbourliness. The ties of sympathy between the more and the less favoured sections of society have been strengthened at a time when social solidarity has been called for as never before.

Australian Universities and the Depression

The decreased absorptive power of industry and of the professions during a time of depression is likely to leave more young people free to continue their education and thus attend the university. On the other hand, a greater number of parents are unable at such a time to meet the cost of a university training for their children. It would be difficult to say on *a priori* grounds which of these two factors will have greater weight and, consequently, whether attendances at the universities will increase or decrease.

A comparison of the figures for 1929 and 1932 shows that during those years the total number of students in all universities has increased by 17 per cent. None of the six universities has suffered a decrease in attendance, though there are marked differences in the proportionate increases. The greatest gain has taken place in Western Australia. The increased facilities arising from the completion of the fine new buildings of that university during the period have probably had an influence on the enrolment of students.

The following table, in addition to showing the number of students, shows for each university the amount received from students' fees and the amount received from the respective State Governments.

	1929.			1932.		
	NO. OF STUDENTS	REC'D FROM FEES	GOV'T GRANTS	NO. OF STUDENTS	REC'D FROM FEES	GOV'T GRANTS
University of :		£	£		£	£
Sydney . .	2,520	44,177	74,047	3,091	61,263	53,038
Melbourne .	3,119	62,141	65,966	3,384	67,445	55,600
Adelaide . .	2,279	27,529	42,476[1]	2,413	27,499	36,600[1]
Queensland .	666	6,440	24,200	826	8,206	18,900
Western Australia	497	928	30,500	763	1,389	24,800
Tasmania . .	351	3,140	12,721	363	3,214	9,740
Totals .	9,432	144,355	249,910	10,840	169,016	198,678

[1] *Exclusive of grants of £12,500 in 1929 and £15,500 in 1932 to the Waite Agricultural Research Institute.*

It will be observed that, taking the totals for all universities, the receipts from fees have increased by £24,661 while the grants from the State Governments have decreased by £51,232.

Although fees from students and Government grants together make up the major part of each university's income, they do not

constitute the whole of it. In varying degrees the Australian universities have received legacies and bequests. But it may safely be assumed that, if there have been increases in income from such sources, they would not go any distance towards counterbalancing the fact that the combined income from grants and fees was in 1932 £26,571 less than in 1929. Thus on decreased incomes the universities have had to cater for an additional 1,408 students.

In these circumstances the attention of the administrative bodies of the universities has been directed, on the whole, towards holding ground already won rather than towards breaking new ground. For all that, the following expansions and modifications are reported.

Melbourne University in 1931 appointed a second Professor of Law and remodelled its Law curriculum so that the Law School is now less dependent on the Arts School than it was formerly. Teaching has been increased in subjects dealing with political philosophy. A full-time Professorship of Obstetrics has taken the place of a part-time lectureship in that subject. A Professor of Economics has been appointed and an Economics School has been set up within the Arts School.

Sydney University reports donations from private individuals and from the Italian Government for the establishment of a lectureship in Italian. In 1931 the Rockefeller Foundation made a grant of £100,000 for the building and equipment of a medical laboratory. During 1932 the States other than New South Wales withdrew their annual subsidies to the Chair of Anthropology at Sydney University, but the Commonwealth Government has increased its grant.

The University of Queensland in 1931 appointed a Director of Dental Studies as a step towards the establishment of a full degree course in Dentistry. An International Relations Club has been formed at the University under the ægis of the Carnegie Endowment for International Peace.

The University of Adelaide has recently opened two important buildings, the Barr Smith Library and the Johnson Chemical Laboratories. The University has also just commenced the building of a Great Hall, for which funds were provided by Sir Langdon Bonython. This building is expected to cost approximately £50,000.

II. Educational Developments in the Schools

The foregoing review of the effect of economies makes it impossible to avoid the conclusion that the depression has brought in its wake some distinctly unfortunate consequences. It is therefore gratifying to be able to turn to a brighter side and show that some real advances have been made. One is reminded that, under the inspiring leadership of Mr. Frank Tate, the Victorian teachers at the beginning of the present century rose to the occasion in meeting the demands of a radical change in the curriculum and methods of teaching. They attended summer schools and conferences and introduced a new educational era for the State, though, so far as all

indications at the time could reveal, the outlook for the teachers themselves was so black that few if any of them could see any chance of promotion of any kind during the whole of their professional career. The present crisis has awakened something of the same fine attitude in many teachers throughout the Commonwealth.

Young Farmers' Clubs in Elementary Schools

During the last two years or so there has been a surprising growth in all States in the number and in the activities of Young Farmers' Clubs, or Home Projects Clubs as they are called in Western Australia and South Australia. It would be difficult to trace the precise origin of the movement, if indeed it had any single origin. The establishment of school gardens, nature-study activities and agricultural work helped to pave the way for the present movement. Reports of the successful working of Young Farmers' or Calf Clubs in the United States undoubtedly had a stimulating effect.

The Young Farmers' Club is simply an organisation of the pupils within a school for the systematic and scientific pursuit of projects in the care and study of animals and plants. Under the guidance of the teacher the children in these clubs rear poultry, pigs, calves, sheep or bees, they grow fruit, cereals, tobacco or other plants, they study the effect of the top-dressing of pastures or of the rotation of crops, they study the composition of soils and the benefits of manures of various kinds. As a rule, a given school concentrates on one or two main types of work, but there may be as many individual projects as there are members of the club. The work undertaken by a school is usually closely related to the life of the district; it may indeed represent a direct attack on some local problem.

Each child undertaking a project as a club member has to keep a detailed record of his work as well as accurate accounts of receipts and expenditures. The officers of the club are elected by the children from their own number, and at the regular meetings correct rules of procedure are followed. Field days give an opportunity for the parents to gather at the school. In some cases these days have assumed much local importance and have the status of an important function in the life of the community. On such occasions the children display their produce and give an account of their work.

The following extract, which is typical of notices which are appearing almost daily in the press, refers to a field day at Notting Hill, Victoria, which was attended by about 500 persons, including the Minister for Education, the Director of Education and the member of Parliament for the district: "Lectures and demonstrations were given by children on milk testing, separating and hygiene, pastures, cultivation, plant dusting, poultry, sheep, drainage, carpentry and motor ploughing. A debate was held, and there was a parade of stock owned by members of the club. Competitions were conducted for judging stock and ploughing. The ploughing competition, which was the first of its kind conducted in Victoria, was designed to test the boy's ability to plough, his knowledge of the

implement and the manner in which he managed his horses." The ploughing competition referred to was won by a boy of about 12 years of age.

Much assistance has been given to the movement on its technical side by other State Departments, particularly the Departments of Agriculture. Teachers and scholars have, in many cases, become learners together in the working out of projects and experiments.

In South Australia there are 225 schools in which one or more projects are on foot. Returns of receipts and expenses by 1,100 of the young farmers in these schools show a total net cash profit of £660. New South Wales has approximately 130 clubs in operation with a total enrolment of 3,000 members. It is also announced that the Education Department proposes to provide through the Sydney Technical College correspondence courses for Young Farmers who have left school. For a small fee boys or girls will receive further expert guidance in the particular section of work they commenced to study while at school. New South Wales has three supervisory teachers, in addition to a Supervisor of School Agriculture, stationed in various parts of the State so that they can co-operate with advisory committees in the establishment of clubs. In Victoria the movement is growing apace. Over 300 clubs have been formed, and scarcely a week passes without an addition to the number. The enthusiasm of the teachers who have taken up the work is well illustrated by the fact that 70 of them recently attended at their own expense a fortnight's course of instruction arranged by the Department in Victoria. In Western Australia much interest is being taken in the movement and many types of project are on foot. Tasmania has seen a marked extension of the agricultural work of her schools. Many children have carried out home projects in agriculture. Calf Clubs are also being formed in some schools. A number of Tasmanian teachers gave up a portion of their last Christmas holidays to attend a school of instruction in agriculture. Seedsmen in the larger centres have given all the seeds required, and the Electrolytic Zinc Company has supplied all the manures needed, delivered free of cost to the schools. The growth of home projects in Queensland is well illustrated by the following figures. In 1927 there were 53 schools, in which 74 clubs had been formed. In 1931 there were 243 schools, in which 399 clubs were in operation. The total membership increased during this period from 546 to 3,200.

The foregoing sketch of the development of the movement in each State gains its chief significance from the fact that though the formation of clubs has been encouraged by the Education Departments, no pressure has been placed on any teacher or school to take up the work. The movement is entirely voluntary.

The educational soundness and the value to the community of this movement needs no emphasis. It appeals to the child's native interest in animals and in growing things ; it links home and school in a new and vital fashion ; it catches the full value of the idea underlying the project method while avoiding any risk of artificiality ; it

is so firmly embedded in realities that it can scarcely undergo the academic deterioration which has so often beset attempts to introduce a genuine element of realism into school work; in the hands of a good teacher the interest and the incentives derived from the work of the club will give a new zeal and a new significance to many of the regular school studies. The movement is likely to be of particular value in Australia if those critics are correct who affirm that Australian schools are apt to err on the side of formalism in methods of instruction, and of overstress on academic achievement in the wider aims of the school. An awakening of interest in scientific farming methods has already been evidenced in many districts where such clubs have been formed. It is thus no exaggeration to say that the movement is potentially one of national importance. For a country depending as Australia does on its primary products this new phase of school work is so truly rooted in the soil that it can scarcely fail to bear fruit.

Revision of Primary-school Curricula

Almost all States have under review at any given time certain sections of their courses of study. Complete redrafting of primary or secondary curricula usually takes place at intervals varying from about five years to fifteen years. There is certainly no tendency to err on the side of rapid and radical changes. After admitting the need for a considerable element of stability, it may legitimately be questioned whether school curricula are sufficiently sensitive to the rapid changes in present-day social and economic problems.

For several reasons the revision of primary-school curricula initiated in Victoria in 1932 was an important event in Australian education. Although class-room teachers have often previously been represented on committees charged with the responsibility of revising courses of study, no State had attempted up to this time to make such a revision a co-operative effort involving all teachers in primary schools. Teachers throughout the State were formed into groups which met under the district inspectors for the discussion of sets of questions regarding the curriculum which were sent out by the central committee. The opinions of these groups were given full consideration and were often valuable. Large subject committees worked out details while the central committee co-ordinated and guided their work.[1] Stress was placed on the view that so far as possible the new curriculum should centre round the carrying out of activities, both mental and physical, which would be meaningful for the children. Most important of all, the new curriculum is to be regarded as subject to continuous and not merely to occasional revision. For the present year it is being tried out in some 200 schools which volunteered to introduce it. After modifications made in the light of the experience so gained it is expected that it

[1] The movement owes much to Mr. G. S. Browne, Vice-principal of the Melbourne Teachers' College, who acted as Chairman of the General Committee.

will be generally adopted in Victorian schools in 1934. Never before in Australian education has there been such a good chance of developing in the teaching body a truly professional attitude towards the curriculum.

The Victorian revision just described is of special interest because of the methods adopted, but other States have recently taken steps to bring their curricula more into line with modern educational thought. Western Australia revised its primary-school curriculum last year, and in the new curriculum provides greater latitude for head teachers to vary the courses of study subject to approval of the district inspector.

Developments in Secondary Education

It may well be that courses of study in high schools are in greater need of critical examination than are primary-school courses. The situation is, however, not so easily dealt with on account of the fact that these schools prepare for external examinations conducted by the universities. Several States are paying particular attention to the development of suitable education for children between the ages of 12 and 14 years. Apart from high schools of the ordinary type, children of these ages are being catered for by the establishment of schools with a practical bias. In several States junior technical schools and domestic arts schools were started a number of years ago. Queensland reports the establishment within recent years of intermediate schools in towns with a population of six thousand and upwards. Extensive training in woodwork for boys and domestic arts for girls is provided in these schools, which are regarded as feeders to higher secondary schools and technical colleges. Somewhat similar schools are found in South Australia under the name of central schools. New South Wales and Queensland have established District " Rural " schools which attempt to provide for country children a cultural education with a definite background in rural interests and pursuits. To some extent they form a country counterpart to the junior technical schools in the city. Queensland went so far as to provide free passes on the railways up to distances of thirty miles for children attending these schools and free motor transport for children who could not travel by rail. In the desire to encourage land settlement, Queensland, under the ægis of the Agricultural Department, has recently established a new type of school in which six months' intensive training in practical agriculture is given to selected boys. After the course the boys are placed at farming work through the co-operation of outside bodies.

South Australia has recently formed a committee to bring about greater co-ordination between the work in the various types of super-primary school and to encourage craftwork in secondary schools of the ordinary type.

In New South Wales the growing popularity of Domestic Science Schools has led to the establishment in them of fourth- and fifth-

year classes. Pupils who so elect may now sit for the Leaving Certificate Examination. From these groups it is proposed to recruit students for training as teachers of domestic arts in large schools and in country schools.

To readers of this and other sections it will be obvious that Australian education is giving serious attention to the provision of varied types of training above the primary-school level, and that it is also striving to introduce a greater emphasis on the practical side of education. It must not be supposed, however, that what have been described are more than the growing points of educational practice. Much yet remains to be done. The following quotation from a recent report by the Superintendent of Technical Education in Queensland shows that in his opinion the requirements of the situation are far from being fully met:

> "Our educational system has been designed almost wholly for those who have as their objective the university degree courses and the learned professions. . . . Less than 16 per cent. of the pupils who pass through our primary schools reach the State scholarship standard, less than 8 per cent. of them reach the standard of the Junior Public Examination, and less than ·8 per cent. the standard of the Senior Examination, so that our whole system is based on the requirements of less than 1 per cent. of the population.
>
> "The Scholarship Examination barrier is based on studies which are largely of an academic and abstract nature. Quite a large number of pupils can deal best with matters of a concrete order, and only a small proportion of them can think out abstract problems.
>
> "Under our present system, the majority of our young people, when they reach the age of 14 or 15 are at a loose end. They have acquired very little interest in or love for study in any direction. . . . It is highly desirable that a new type of full-time secondary education be inaugurated for girls and boys who have completed their primary education and who are beyond the age of, say, 14. . . . The type of education proposed would be a new branch of the educational tree, and pupils undertaking studies of the kind indicated would not be considered necessarily of lower mentality than those who pass the Scholarship Examination."

Developments in School Organisation and Examinations

New South Wales is, so far as known, the first Australian State to establish special classes for children of superior ability. In 1932 the brightest children of fifth-grade standard found in a survey of a number of schools were placed in two special classes. The children were selected on the basis of ability, as revealed by intelligence tests, and scholastic attainment, as measured by school tests. The intelligence quotas of the children ranged from 120 upwards. Children from these special classes who secured admission to a secondary school were grouped together at Sydney Boys' High School and Sydney Girls' High School respectively, where their progress is being carefully studied. In 1933 similar classes have been formed for fifth- and sixth-class pupils. In two schools the pupils have been definitely classified on the triple track basis and progress is being closely observed.

Tasmania has on foot an interesting experiment in the problem of selecting children for secondary education. The candidates for admission to such schools at the end of 1932 were given an intelligence test in addition to the ordinary scholastic examination. A few were found to score well on the intelligence tests who would not have been selected for secondary education on the examination results alone. Some of these were admitted and their progress is being carefully watched. Early reports suggest that they are likely to justify their inclusion.

Victoria has taken an interesting step in abolishing the Qualifying Examination. This examination was given at the end of the sixth school year and was used to judge fitness for admission to a high school. Even before its abolition head teachers were allowed to recommend for the receipt of the certificate those pupils whose school record and attainments were consistently of high standard. Most of the candidates sat for the examination set by the Department. Now even that has gone, and admission to high school will take place as a routine matter on recommendation of the head teacher. In the 1933 YEAR BOOK an account is given of the system whereby in Victoria certain accredited secondary schools are allowed to grant their own Intermediate and Leaving Certificates. The new development gives rise to a situation which possibly has no counterpart in any other British community. It will now be possible under certain conditions for a student to pass from the beginning of the primary school to the end of a university career without sitting for any examinations other than those imposed by the institution which he is attending at the time.

Educational Broadcasting

Educational talks of a popular kind have been included more or less consistently in Australian programmes from the early stages of systematic broadcasting. It is only during the last three years that school broadcasting has developed. This phase had its origin in Victoria, where in March 1931 the late Director of Education, Mr. M. P. Hansen, set up a committee to investigate the possibilities of broadcasting as an educational medium. The committee aimed at providing talks which would be of interest and assistance to pupils at the secondary level. In addition, it arranged for more systematic talks for adults. The subjects included in the first school series were English, geography, French, physical science, musical appreciation, history and mathematics. The aim was not so much to cover the work which would ordinarily be done in class as to supplement it. The work of the Committee has been continued up to the present time, and a steadily increasing number of schools are listening in.

During 1932 and 1933 similar developments have taken place in almost all the other States. In the New South Wales scheme primary as well as secondary scholars are catered for. In Western

Australia a series of talks for schools in the first quarter of the present year is being followed by a series for adults on a wide range of topics. The question of school broadcasts is, in the meantime, under review by the committee. The Queensland Committee is conducting simultaneously a series of morning talks intended primarily for womenfolk, an afternoon session for schools on two days a week, an evening series for adults on three evenings a week and agricultural talks for farmers on two evenings a week. South Australia has decided on an experimental introduction of school broadcasting in 1933. The subjects to be dealt with are English, geography, history, modern languages, science and musical appreciation.

The developments just indicated have been encouraged by the recently formed Australian Broadcasting Commission which was modelled on the B.B.C. The matter of school broadcasts is still in a frankly experimental stage. It will take some time to determine the limits of their usefulness from the point of view of the age of the children and the type of subject to be dealt with. It may well be that a specially useful function of educational broadcasting in Australia will prove to be that of catering for the thousands of young people in isolated areas who are receiving their education by correspondence.

Local Efforts

As illustrated in the section on Young Farmers' Clubs, all the States are taking steps to encourage local interest in the schools. In South Australia the establishment of annual exhibitions and sports meetings has met with marked success in several districts. For example, in the far west of the State a pioneering township named Minnipa was the centre where 500 children gathered from 52 schools. Many of those who attended were accommodated in tents. The major portion of the work necessary for organising the exhibition of school work, the demonstrations by the children and the sporting events is carried out by local committees of parents co-operating with the teachers. These annual meetings become one of the chief events in the life of the district for scores, or even hundreds, of miles around. The success of these gatherings is a convincing indication of local interest in the schools.

South Australia also reports that during 1932 the sum of £17,331 was raised by school committees, mothers' clubs and similar organisations. This effort at the worst stage of a depression of unprecedented severity by a State with a fairly small population and no great natural resources speaks for itself. If figures were available from other States, they would probably be equally impressive. A good illustration of local effort comes from Tasmania, where fifty parents' associations volunteered to carry out the work of repainting their schools with materials supplied by the Department.

Vocational and Child Guidance

All States now have vocational guidance schemes in operation. In spite of the present difficulty in placing children on leaving school, to some extent because of that difficulty, the movement has been developed and consolidated during the last two years. We may instance what has happened in Victoria in this connection. The course of study in high schools of that State has been amended so that a vocational guidance period is prescribed. In all large schools one member of the staff is now selected as "careers master." A complete survey of the annual absorptive capacity of some 200 occupations in the State was carried out with the aid of the Australian Council for Educational Research. A monthly vocational guidance bulletin is issued. Forty-five district advisory councils are now in operation. Local vocational guidance bureaux have been established in four city and ten country centres. The work of these bureaux is to place children in positions rather than to give tests of vocational aptitude. The vocational guidance organisations have done much to deal with the problem of unemployment. In addition to providing jobs whenever possible, they have arranged for courses of instruction in trade work for boys and girls awaiting employment.

In Melbourne in August 1932 there was established a Vocational and Child Guidance Centre under the joint auspices of the Vocational Guidance Association and the Council for Mental Hygiene. This centre provides the services of a psychiatrist, a psychologist and a trained social worker. It is the first child guidance centre of this type to be set up in Australia. For various reasons the combination of child guidance and vocational guidance in the one centre is not at all usual, though the idea commends itself to experts. In practice it is proving that the two types of service have very much in common, and that mutual benefits result from linking them together.

Gillies's Bequest

William Gillies, a native of Scotland, who came to Victoria in search of health and lived in that State for a number of years, left, when he died, an estate of £10,000, the income from which, according to his will, was to be used in the encouragement of instrumental music in the State Schools of Victoria, the art of reading and the encouragement of nature study. His gift has had a markedly beneficial effect in all three directions. The schools of the State now have 40 brass bands, 17 fife bands, 26 violin classes and 9 orchestras. Competitions and massed concerts are now an annual feature. Perhaps even more important is the library scheme which is being worked out under this fund. Circulating libraries have been specially designed to meet the needs of small country schools. The majority of the schools in the scheme at present have an attendance of less than 30 pupils. In

1932 the number of schools participating was 75. In the present year 100 schools have been added and it is expected that eventually 500 to 600 schools will be provided for. Boxes containing 20 books each are sent to participating schools. These are exchanged at least twice a year among schools in the same district, so that each school obtains the use of at least 60 library books for the year. The books are in the first instance purchased from the bequest money. A charge of £1 per year is made to participating schools in order to assist in meeting the cost of freight, checking of books and annual renovations and repairs in Melbourne. Careful selection of books is made in the first place, and the opinions of pupils and teachers are obtained at regular intervals.

III. Development of a National Outlook in Australian Education

Recent years have seen developments which suggest, or which at least should encourage, the emergence of a national sentiment in Australian education. In an article written a short time ago by Prof. K. Hancock, of Adelaide University, attention was drawn to the fact that, in the last ten or fifteen years, there has been a marked increase in the number of serious studies of Australian problems treated from a national point of view. Before the war there were few such studies except perhaps from the geographical standpoint; but in recent years problems of finance, of industry, of production and of population have been given careful attention by capable students. Amongst these sociological questions that of education could be very legitimately included.

Although present economic difficulties are placing a strain on the political relationships between some States and the Commonwealth, it is probably correct to say that in personal, as contrasted with political, feeling there is a greater sense of unity than ever before. The experience of many thousands of Australian soldiers from all States, travelling overseas together and fighting side by side during the war, probably did more in three or four years to develop an Australian community than fifty years of ordinary evolution would have done. An Anzac was not a soldier from Queensland or from Tasmania or from Western Australia, but a soldier from Australia or New Zealand. To the European observer, and indeed to the Australian himself, there were no differences in speech or appearance to indicate which portion of the Australian continent any given man came from. The growth of various organisations and associations which cut across State boundaries as well as the participation of Australian rather than State teams in international sports have all given stimulus to the development of a national solidarity. It is to be hoped that these fundamental community ties will not be disrupted by the real and imaginary grievances which at present disturb Commonwealth relationships and even lead to secession movements.

Having thus sketched in the background we may now devote attention to the various influences which are tending towards the development of a national point of view in education. We can best indicate what we mean by a national point of view by instancing some of the directions in which it will reveal itself. It will reveal itself, for example, in the curricula of the schools. In history and geography local studies will be but a prelude to a study of Australia and its problems ; the children will be taught to think of themselves as citizens of a Commonwealth as well as of a State. The national point of view will reveal itself in an interchange of opinion and information on educational matters over the whole area, in the making of surveys and the writing of books which are not merely sectional in reference, in the willingness of the various educational authorities to co-operate with each other and to agree on uniformity of procedure where such uniformity is desirable. The greater the extent to which Australian education becomes national in character the less likely are there to be marked differences in standards in the various States, whether they be standards of accommodation, of instruction, or of teachers' remuneration. During the last thirty years there have been definite developments along each of the lines just indicated, but there is undoubtedly room for still further progress.

Action by the Federal Government

There is here no disguised suggestion that Australia is moving, or that it should move, towards a general assumption of educational authority by the Commonwealth. Even as it is, Australian education would probably benefit by less rather than more centralisation. A truly national sentiment in education must be a natural growth. It cannot be achieved by the mere setting up of administrative machinery. It is probable, however, that the Commonwealth will, as time goes on, show an increased interest in educational matters. If the Commonwealth is a genuine community, those who are guiding its destinies cannot be indifferent to such an important social agency as education. Unless the unexpected happens and State Governments are abolished, there is little if any likelihood that the States will cease to exercise their present control over their own educational policies and procedures. Even if State Governments were to be abolished, the present State areas would probably be controlled by boards or commissions of education corresponding to the existing Education Departments. There are two directions in which the Federal Government is likely to show its interest in education. It may, in the first place, enter more actively upon the work of compiling educational statistics and distributing information. At the present time educational information for Australia as a whole is included in the various issues of the Commonwealth YEAR BOOK, but this information is to a large extent an analysis of educational statistics published by the various States. So far the Common-

wealth has not initiated educational enquiries of its own.[1] The Federal Government may, in the second place, build on the small beginnings which it has so far made in the matter of subsidisation.[2] In both of these matters there is a distinct precedent in the activities of the United States Office of Education, although there is in that country a firm belief in decentralised educational administration. The actions of the Commonwealth in setting up a broadcasting commission, in establishing a censorship of books and of motion pictures and in financing a Council of Scientific and Industrial Research bring it into fields not very far removed from the field of education.

It is, however, chiefly in the voluntary formation of scientific associations which embrace all States and in the holding of inter-State conferences that we shall find what we are looking for. We shall be concerned only with those which are specifically educational in character.

The Universities' Conference

A conference of representatives of the six Australian Universities has met annually for the past twenty years. A full conference is held every second year and a standing committee meets in the intervening year. The report of the latest conference shows that the following topics were amongst those discussed: correspondence from the Universities' Bureau of the British Empire, matriculation requirements, examinations for the Military College and the Public Service, the academic year, professors and membership of Parliament. The following motion was passed at the Conference: "That in the opinion of the Conference it is desirable that each University should recognise the matriculation requirements of each other University without question, and that if any University should propose to modify its requirements, it should communicate its intention to each of the other Universities." The significance of the motion lay in the fact that certain students from Melbourne who had received their Leaving Certificate by internal examination at an A Class school, and were thus qualified to matriculate at Melbourne University, had been refused admission to one of the other Universities unless they sat for the matriculation examination of that University. The motion illustrates the function of the Conference in securing co-operation in such matters. The Universities' Conference is a purely advisory body. It has no administrative power, nor are its decisions binding on the individual Universities which are represented.

The Conference of Directors of Education

Comparable in a number of respects to the Australian Universities' Conference is the biennial conference of the Directors of Education.

[1] The nearest approach to such an enquiry is, possibly, the Report on Mental Deficiency in all States made by Dr. Ernest Jones at the request of the Commonwealth Government in 1929.

[2] Cf. the subsidisation of a Chair of Anthropology at Sydney University.

The first conference was held in Adelaide in 1916. The conference meets in the various capital cities in rotation. The last few meetings have been attended by the New Zealand Director of Education as well as those of the six Australian States.

These conferences give a valuable opportunity for the interchange of ideas and information. The agenda paper usually covers many phases of primary- and secondary-school work. Information is exchanged concerning such matters as staffing of schools, salaries of teachers, school holidays, vocational guidance, special classes and so on. The visiting directors are taken to see new types of school in the State where the meeting is held. One result is that any promising educational development is apt to spread from one State to another much more quickly than would be the case if no such conference were held.

On more than one occasion the conference has given its attention to the problem of securing uniformity in educational nomenclature and in the presentation of educational statistics. Some States speak of " grades," others of " classes " ; some call the first school year the preparatory grade and the next year the first grade, but most call the first compulsory year the first grade ; there are confusions in the use of terms such as " intermediate," " central," " super-primary," " post-primary," " rural " and " secondary." Owing to differences in compilation and presentation there is scarcely one valid statistical comparison which can be made without difficulty for all States. In some respects there is no country in the world which should have less difficulty in achieving a uniform method of presenting its educational facts. It is doubtful, however, whether any rapid progress can be expected, particularly because the present terms and methods of presenting statistics are provided for in some of the Education Acts. The matter would appear to be of sufficient importance for the appointment of a standing committee which could explore the situation in detail. There is little if any doubt that the statistical facilities and methods of the various Education Departments are far from being adequate. For example, none of them makes use of modern electrical sorting and tabulating machinery, while few of them have available officers with any special statistical training. Since it is probable that one set of statistical machinery could deal with all Australian educational statistics, it would be a rational solution if the Australian Education Departments combined to set up a centre where the returns from their schools could be analysed and summarised more quickly, more completely, and more accurately, and, perhaps, more cheaply, than is possible at the present time.

Special reference should be made to the fact that, at the Directors' Conference held in 1932, approval was given to a scheme for the exchange of teachers between any of the States for periods not exceeding twelve months. Each Department of Education will publish in its official Gazette any applications for exchange.

The Federated State School Teachers' Association

Each Australian State has its association of State school teachers. In most cases this body is known as a Teachers' Union. A Federal organisation under the name of the Federated State School Teachers' Association of Australia provides a link between the various State bodies and maintains a permanent office and secretary. In the early twenties all State associations were affiliated with the Federal body, but the adoption of a new constitution in 1928 led to the withdrawal of Queensland, South Australia and Western Australia. In the effort to secure once again the affiliation of all States a convention was called in Sydney in January 1933 " to consider a common basis for the formation of an Australian Teachers' Union having for its first object the promotion of education throughout Australia as a national rather than a State obligation while preserving State Education Departments as separate entities." [1] South Australia and Western Australia did not attend this convention, but the delegates from the other four States agreed upon a revised constitution and forwarded it for the consideration of the Unions in the States not represented.

The Federated Teachers' Association concerns itself with matters of general interest to Australian teachers. For example, the exchange of teachers referred to above was one of several questions which it brought to the attention of the Directors' Conference. It has also advocated a system of certification for teachers which would apply to all States. One of the activities of the Federal Association is to arrange for conferences. A successful All-Australian Education Conference was held in Sydney this year. The Governor-General of Australia opened the Conference, which included representatives of both State and non-State schools, and addresses were given by prominent educationists. One result of the Conference was the setting up of a Committee of Education which will function in each State in order to promote a public conscience in education. It was decided to hold such conferences biennially.

The Headmasters' Conference

In the sphere of private education there have also been recent developments which cut across State boundaries. The first Australian Headmasters' Conference was held in Sydney in May 1923. Representatives attended from all States and discussed matters of common interest. The Conference, for example, affirmed its belief in the necessity for having a religious basis in education, and thus by implication disapproved of the secularisation of State Education. Addresses were given by the heads of prominent schools and by leading business men. Sub-committees were formed to investigate particular questions. The Conference, which is to be held periodically, will serve to crystallise and give expression

[1] Quoted from a statement supplied by Mr. A. G. Alanson, Secretary of F.S.S.T.A.A.

to the educational ideals and methods of a group of schools which carries much weight in Australian public life.

The Australian Council for Educational Research

Perhaps nothing will do more to encourage a national point of view in Australian education than the establishment in 1930 of the Australian Council for Educational Research under a grant from the Carnegie Corporation of New York. The Council is a Federal body. Its Constitution provides for representation of the various States through election of delegates by State Institutes for Educational Research. A meeting of the delegates is held annually to consider questions of general policy and the making of grants from its funds for investigational purposes. A number of these investigations relate to the whole Commonwealth and not merely to one State. The Council, in its work of establishing standardised tests with norms for the whole of Australia, is carrying out projects which for the first time link schools in all States in a common effort. Such work is possible only because the Council has the full co-operation and confidence of all State Education Departments. In one of its recent publications, *The Primary School Curriculum in Australia*, the contributors of the various chapters are drawn from all States, and they discuss their phases of the subject from a general rather than a local point of view. The Council has a position of great advantage in that it is an independent society which exists solely for the encouragement of scientific studies of education. It has no commitments which prevent it from speaking freely, nor should there be any suggestion of partisanship in its findings. It provides a common meeting-ground for all interested in the study of educational problems.

The foregoing are the various movements which appear to be fostering the growth of a national rather than a merely local point of view in Australian education. That such a growth is desirable cannot be questioned in view of the increasing necessity for taking the broad rather than the narrow view, for the development of ever-wider circles of community feeling, for breaking down the isolation which so readily leads to self-satisfaction, and for the full utilisation of education as the chief instrument for improving the quality of social life and the intellectual level of community action in a country which has a firm and not unjustified belief in its own future.

K. S. CUNNINGHAM.

CHAPTER FIVE

NEW ZEALAND

The University

Finance

THE Government statutory grants in aid of the New Zealand University and its constituent colleges consist of revenue from national land endowments and of direct votes from the Consolidated Fund. Owing to the depression all land rents have fallen and the Government has found itself compelled to withdraw its annual special grant to the central body. The following table shows what has happened:

University Colleges:	1928–9	1932–3
Revenue from National Land Endowments	13,560	7,420
Government Grants	69,207	41,719
Government subsidies on voluntary contributions	10,467	nil
	£93,234	£49,139
University of New Zealand:		
Government grant for general administration	£3,845	nil

The statutory grant last mentioned has not been paid since 1930, but fortunately for the University finances the revenue from examination fees increased from £28,812 in 1930 to £32,050 in 1932. The following table compares the number of examination entrants in 1928 and 1932:

	1928	1932
University Entrance	5,524	4,725
Entrance Scholarship	160	295[1]
Degree	6,204	7,290

[1] *The increase in the number of these candidates was due to the Government's deciding to grant University Bursaries only to students who qualified therefor by passing the Entrance Scholarship Examination.*

The decrease in the number of University entrance candidates was no doubt due mainly to the financial depression and the consequent difficulty in securing employment. In normal times a considerable number of employers engage only young people who have passed the Entrance Examination. This point and its effect on the school curriculum will be dealt with later.

The effect of the above on the finances of the University is interesting. In 1929–30, the last year in which the Government

grant was paid, the Revenue Account of the University showed a debit balance of £3,966 after £1,500 had been transferred to assist the Scholarship Account. In 1930–1 the Revenue Account showed a credit balance of £6,219 and £300 was transferred to the Scholarship Account. The Senate also decided to withdraw some of the post-graduate and travelling scholarships.[1]

The University Colleges have, however, had their finances depleted not only by the reduction in Government grants and in the National Land Endowment revenue, but also by heavy losses in rents from their own land reserves.

Student Enrolment

The number of students attending the Colleges showed a slight increase, due no doubt to the difficulty experienced by students in securing employment. As might have been anticipated, the increase was principally in the number of "exempted" students, that is, those who studied at home and did not actually attend lectures. The following table shows the numbers in different years:

	1930	1931	1932
Auckland University College	1,347	1,335	1,349
Victoria University College	1,074	1,112	1,140
Canterbury University College	1,121	1,201	1,073
Otago University College	1,259	1,221	1,350
Massey Agricultural College (Palmerston North)	208	152	191
Canterbury Agricultural College (near Christchurch)	68	90	68
	5,077	5,111	5,171

The increase in the number of students had little effect on University funds, as the Colleges were giving every possible assistance to students who found some difficulty in paying their fees.

The following tables give, respectively, details which may be of interest to University Authorities in other countries:

	1928	1932
Number of students actually attending lectures	4,255	4,149
Number of exempted students	547	763
Percentage of male students	71	72
Percentage of women students	29	28
Percentage receiving free education:		
Men	39	40
Women	58	56
All Students	44	45

[1] With reference to scholarships, it is interesting to record that a new scholarship entitled the "Michael Hiatt Baker Scholarship," tenable at the University of Bristol and of the annual value of £200, was established for New Zealand students through the generosity of Mr. and Mrs. Hiatt C. Baker of Bristol, who gave this scholarship in memory of their son, Hiatt Baker, who was killed in the Napier earthquake, 1931.

The occupations of the students were as follows:

	1928		1932	
	M.	F.	M.	F.
	PER CENT.	PER CENT.	PER CENT.	PER CENT.
Full-time students	32	43	43	53
Teachers and training-college students	22	44	16	35
Government and local bodies employees	16	1	13	1
Other	29	6	26	6
Unknown	1	6	2	5

Matriculation and the Secondary Schools

The Education Department and the New Zealand University have for some time been seeking a method by which the University Entrance (Matriculation) Examination may be prevented from unduly dominating the curricula of secondary schools. Proposals have been put forward to institute a " School Leaving Certificate " which should be awarded on a wide range of subjects, the candidate taking the University Entrance Examination only in subjects which the University finds it desirable or necessary to specify for the College entrance qualification. The possibility of deciding both the award of the Certificate and the University entrance qualification by a system of accrediting by school principals has also been discussed. It is understood in New Zealand that University Authorities in Great Britain are opposed to the accrediting system, so far, at all events, as it may be applied to University entrance, and the New Zealand authorities, not wishing to institute a system that might cause difficulties to New Zealand students proceeding to English Universities, have in the meantime set their face against accrediting. There are, however, not a few educationists in this country who believe that the University Entrance Examination unduly dominates the secondary schools and hinders that development of diversified courses without which the needs of different types of intellect and aptitude cannot be effectively met. Further, what is known as the " Matriculation pass " bulks too largely in the minds of parents. It has, too, been given a commercial value by banks and other employers. The result is that schools, such as technical schools, which do not find it desirable to provide University courses except in special cases are likely to lose prestige in a community dominated by the desire for examination successes. Hence the number of misfits in post-primary schools, particularly in secondary schools. There is little doubt that in the near future the Education Department and the University will arrive at a satisfactory solution of the problem. It is not likely that the Department will hand over to the University the responsibility of deciding awards of School Certificates, and the University Authorities do not desire this. Probably the University Entrance Examination results will be utilised, at all events in those subjects

that are common to most school courses, whether or not the candidate endeavours to comply with the full University entrance prescription. The difficulty is not insuperable.

University Extension Work

In connection with the University of Otago, the Home Science School has, through the generous help of the Carnegie Corporation of New York, been able to continue vigorously its extension work in country districts. Itinerant lecturers visit rural centres where home arts associations have been formed, discussion and reading circles have been arranged and practical work organised. The extension service has been in operation for three years. In her annual report for 1932 the Dean of the Home Science School says :

> " Our work has again shown a steady increase—the request for our services still being continuous. Because of the previous lecture-centres growing in numbers, we have in some districts tried out the ' Leaders' School ' plan. The idea of this is that farm women interested and willing to register as Leaders meet at a centre at regular intervals throughout the year for instruction and practice in demonstration work given by a member of the Home Science Extension Service. The Leaders then in turn go back to their individual Groups and pass on the instruction received, at the same time sending in to our Bureau a report of each follow-up meeting held."

In other University College areas the Workers' Educational Associations have found their activities considerably hampered by lack of funds. The Government withdrew its grant, and the work was maintained only through the emergency grant from the Carnegie Corporation. The " Book Circle " plan has been continued with success, particularly in Canterbury. Under this plan books are circulated to Associations in rural districts where study groups have been formed. Economics is still a very popular subject with the Workers' Educational Associations, but generally a wide choice of subjects is provided. The Canterbury Association, for example, organised classes in public speaking, psychology through literature, Esperanto, modern drama, local government, economic problems, horticulture, theory of music, astronomy, folk dancing and English literature.

Secondary and Technical Schools

Secondary and Technical Schools in New Zealand do not, as some suppose, provide overlapping curricula. The former are the longer established and aim at giving mainly an academic type of education leading, in the case of long-course students, to the University Entrance and Scholarship Examinations. Most of the secondary schools are now showing a tendency to provide in addition diversified courses preparatory to commercial pursuits or, in the case of girls, to home-life occupations. Manual training is also entering more largely than previously into the curriculum ; but such schools do not provide technical or even what might be termed pre-vocational

courses. On the other hand, the technical schools do not give purely general or academic courses of instruction. They admit full-time and also part-time day pupils on the same free-place qualification as do the secondary schools; but their pupils have definitely entered for full domestic arts courses, or for commercial courses, or for courses preparing for entry to trades and industries. At the same time, in the smaller centres, where it would be unnecessarily expensive to establish both types of schools, a general-purposes school is provided, termed a technical high school, with junior technical courses as well as the purely academic courses.

The tendency of the older secondary schools to include manual training courses in continuation of the manual work done in the primary schools is undoubtedly leading to the evolution of a single type of post-primary school in all but the cities, where differentiation in school types is not uneconomical and makes for increased efficiency. The outcome of this tendency was seen recently in the amalgamation of the technical and secondary schools in Napier and Nelson. In both cases the principal of the secondary school became the head of the new school, called a Combined School, and the fear has been expressed that the interests of technical education may suffer. Whether this will be the case or not remains to be seen. The influence of the traditional type of academic education is still strong in New Zealand, although the newer technical high schools have done much to make popular those courses that have a closer relation to the needs of the people. A further danger that faces the more practical side of a combined school arises from the fact that such a school is much more difficult to organise than is a purely secondary school, and the proper management of the part-time practical courses, particularly those held in the evening, involves a considerable amount of labour and demands closer attention than is the case with the simpler academic subjects of the ordinary secondary school.

Primary Schools

Elementary Science

During the year the Department made a special effort to improve the teaching of elementary science in public schools. Nature Study is satisfactorily taught in the infants' classes, but the efficiency of the teaching appears for some reason to fall off in the standard classes, particularly where the subject advances to the stage of elementary science.

In all country schools and in most of the town schools elementary agriculture is the branch of science selected for Forms I and II and in some cases for Standards III and IV as well. It is not difficult to explain the poor quality of much of the teaching, since few of the teachers have themselves received adequate training in science either at a teachers' training college or at a university. A small staff of specialist itinerant instructors is employed by the Education Boards, but in very few cases can visits be made frequently

enough to affect the efficiency of the teaching very materially. The Department instructed its inspectors to pay special attention to the subject, as there appeared a tendency to leave the supervision and guidance of the teacher to the travelling instructors.

Raising of School Age

Last year legislation was passed raising the age of first enrolment of school children from 5 to 6 years. Subsequently, in deference to public opinion, Parliament modified the original enactment and allowed children to enrol during the term in which they reached the age of 6. The full effect of the change will not be felt until well on in the present year ; but already school staffs, which in New Zealand are based on average attendance, have been reduced and teachers thrown out of employment.

Kindergarten Schools

Kindergarten Schools are not part of the State system. These schools are established and supported partly by voluntary contributions and partly by Government grants and subsidies. Last year the Government decided to withdraw all State aid. Whether the schools will be able to continue is problematical, as the fountains of public generosity are being drained in all possible directions to relieve distress and maintain philanthropic organisations. The withdrawal of State aid was an unfortunate necessity forced on the country and is undoubtedly regretted by all.

Supply of Teachers

As noted above, the raising of the age of school admission has undoubtedly increased the amount of unemployment among teachers. It was unfortunate that this should have happened at a time when other factors were operating to lessen the number of positions available. The Department had some years previously authorised the training of additional teachers in order that the staffs might be increased and the number of large classes reduced. The financial depression came before these teachers had finished their training, and consequently when they were ready for adult service there was little employment for them. Further, the number of uncertificated teachers had been very substantially reduced by the strenuous efforts of these teachers to qualify for certificates. Lastly, the financial stringency led to fewer women teachers marrying and leaving the service, and in addition an unknown number who had retired re-entered the service.

To alleviate unemployment among trained and certificated teachers the Department formulated and submitted to Education Boards a scheme whereby the amount of work available, apart from permanent positions, might be shared among the unemployed. Positions ordinarily held by probationer teachers (that is, those who

had completed their college training but had not fulfilled all the requirements for their certificate) were made available for the rationed staff, as were also relieving or supply positions. The scheme which was in operation throughout the year proved acceptable to the local authorities, and some 600 young teachers thus received employment, some for two terms and the more efficient for the whole year. The salary paid was at the rate of £100 per annum, with travelling expenses and a lodging allowance of £36 to those who were compelled to live away from home.

Training Colleges

With the object of exploring all avenues for retrenchment in State expenditure the Government appointed a National Expenditure Commission which brought down a large number of recommendations. One of these aimed to reduce the number of teachers' training colleges from four to two, one for each Island. The fact that for many years there had been a training college in each of the four chief centres of population does not point to lavish expenditure in past years, but rather to the manner in which institutions may spring up to serve local needs and then persist after the service they rendered has become national rather than local. It is always difficult to reorganise a national service that has been local in origin, and so it proved in the case of the training colleges. These were at first founded by Education Boards, and any proposal to lessen their number was stoutly resisted. The existing financial stringency proved, however, a sufficient stimulus to induce the Government to stand firm when it decided to adopt the recommendation of the Commission to close the training colleges in Wellington and Dunedin. Arising out of the clamorous opposition to the Government's decision came a proposal from one of the University Colleges that each training college should be made a department or special school attached to the University. This proposal did not meet with the favour of the Department, nor was it supported by all the other three University Colleges. It, however, commended itself to the Parliamentary Education Committee, but was not adopted by the Government. The present position is that there is one training college in Auckland and one in Christchurch. The Wellington college building has been handed over to the Education Department's Correspondence School, and the staff of the *School Journal* and *Education Gazette*. The Dunedin building is not yet utilised.

At the same time as the number of colleges was reduced the allowances to students were also cut down from £85 to £20 in the case of those living at home. Formerly, too, students boarding at training-college centres received an additional allowance of £30. Now no such allowance is paid, but these students are permitted to borrow up to £40 from the Department, the loan to be paid back in instalments when the students secure employment.

Educational Administration

The National Expenditure Commission considered the possibility of reducing State expenditure on education by abolishing the primary, secondary and technical School Boards. The Commission strongly recommended this course, but so far the Government has not adopted the recommendation. It must be realised that practically the whole cost of the schools in New Zealand is met out of the Consolidated Fund. No education rates are levied ; hence the Boards have no responsibility in raising the money which they spend. The Commission proposed that local interest should be maintained and perhaps stimulated by giving the existing Primary School Committees wider responsibilities and placing the post-primary schools under similar governing bodies. Had the Commission's proposals been given effect to, the appointment of teachers, the payment of salaries and major matters connected with buildings would all have become the responsibility of the Department.

T. B. STRONG.

CHAPTER SIX

South Africa

THE two outstanding problems which are at present exercising administrators and others interested in South African education are educational finance and teacher training.

The first involves the related problems of educational control and of the prestige of the Provinces and the second is involved in the former.

These two problems were foreshadowed in the chapter on Education in South Africa which appeared in the Year Book for 1932 (page 627), where a description of the development and present state of the system was given. It will, however, not be possible to realise the significance of the difficulties involved without giving here a brief statement of the genesis of these two problems.

I. Introduction: The Defects of the Act of Union

The fact that they are with us in such an acute form to-day can be traced directly to a weakness in the Act of Union. This weakness was to a certain extent inevitable because the formation of Union, owing to historical circumstances, had to be of the nature of a compromise. Unfortunately education was singled out as the field in which the compromise was made, and it is still suffering from the after effects.

What happened is briefly this. When the four provinces united in 1910 they came together as a *Union* and not as a Federation. All the powers and functions of the four original colonial governments were united in one body, the Union Parliament, and then Provincial Councils were created as *new* institutions in order to administer certain matters of provincial concern circumscribed by Section 85 of the Act of Union. There was, however, the additional stipulation that the Union Parliament can, if it wishes, legislate also on any of the matters thus relegated to the Provincial Councils, and such legislation will then be paramount. This " overriding power " of Parliament placed the provinces, in theory at any rate, in a much inferior position than, for example, the Canadian provinces or the Australian and the American states.

The Union took to itself all the important governmental functions. As regards education, however, in order to console the provinces, the Union gave over to them the very important function of administering other-than-higher (i.e. primary and secondary) education, together with a few other matters like roads and hospitals, while it retained for itself higher education under a Minister of Education. This was the compromise and the provinces were satisfied, because the control of primary and secondary education

was an interest which the provinces rather jealously wanted to safeguard.

Then there is another point which is often overlooked by those who maintain the " sacred rights " of the provinces, and that is that the relegation of education to the provinces was of the nature of a temporary measure. It was actually guaranteed for five years only. Thereafter Parliament was left free to deal with the matter as circumstances might demand. The arrangement was, therefore, definitely experimental. As a matter of fact, when the five years' period had elapsed, the Government appointed (in 1915) the Provincial Administration Commission to go into this whole provincial question. This Commission brought out a very able report in 1917. It declared roundly that the Provincial Councils were not answering the purpose for which they had been created. Instead of being solely administrative bodies dealing with matters of purely local and provincial concern, they had played the rather ineffective rôle of little Parliaments dabbling in national politics which the constitution had definitely placed outside their scope. This Commission, therefore, recommended the abolition of the four Provincial Councils and the transfer of the ultimate control of all education to the Union Government. To take the place of the Provincial Councils it proposed the creation of 14 District Councils to look after local as distinct from national matters. In the midst of the Great War, it was impossible to get people to give serious attention to this matter. Then, of course, was the time to tackle the question and to mend the system before vested interests rendered reconstruction very difficult if not impossible. Participating in the larger life and in the wider financial resources of the Union, the provinces could point to unprecedented growth in the education that had been entrusted to them and thereby justified their continued existence in the eyes of the public.

It was not long, however, before the inherent weakness of this temporary compromise began to show up. Trouble arose, in the first place, out of the rather unsatisfactory demarcation contained in the terms " higher " education on the one hand, and " education-other-than-higher " on the other. These terms were not defined. As Prof. Fred Clarke once so aptly remarked, one could just as well have put up a beam of moonshine to serve as a garden fence. The result was that very soon we find the one authority trespassing into what the other considered its domain and *vice versa*. On the one side the provincial departments, in addition to administering primary and secondary education, also controlled and developed their own normal and training colleges which provided a training involving academic and professional study of a two- and three-year post-matriculation nature. On the other side the Union Department of Education assumed responsibility for industrial, vocational (including housecraft and agriculture) and technical schools which could not in any accepted sense of the term be called " higher " education, because in these institutions

there were many pupils who, besides their vocational work, were receiving instruction in just the ordinary primary and secondary school subjects. Quite apart from the question as to whether these mutual trespassings may have been justified (or not) on educational or other grounds, the fact remains that this unsatisfactory demarcation was sooner or later bound to cause trouble. This difficulty was chiefly educational and administrative.

II. Educational Finance

The second difficulty which arose in course of time out of this compromise was of a financial nature. To finance such an important and costly undertaking as primary and secondary education the provinces naturally needed a considerable amount of money. For the first few years after Union the Union Treasury simply paid all the bills. By 1913 the financial relations between the provinces and the Union had been established by legislation.

The 1913 *Arrangement*

Under this legislation the provinces were, of course, left free to tax themselves to any extent they liked for their own development. They were, however, limited in one respect by the Union. There were the so-called " assigned " revenues which the provinces could collect for their own use, but the rate of which was fixed by the Union. Then in, addition, the Union paid a subsidy to the provinces roughly on the £-for-£ basis. In actual fact the subsidy contribution of the Union constituted considerably more than 50 per cent. of the revenue of the provinces. Yet it had no control whatsoever over the expenditure. This led to extravagance. A province which was wealthy, like the Transvaal, spent a great deal while the Union Government simply had to put up an equivalent in subsidy. This placed the Union treasury in a difficult position because it was never sure to what it would next be committed. Repeated amendments were made to the original Financial Relations Act of 1913 in order to keep the Union's commitments within reasonable bounds, but eventually the system broke down.

The 1925 *Arrangement*

In 1925 a new basis was devised. The provinces were to receive subsidy at a fixed rate based on the average school attendance for each year. The rate varied from £14 per pupil in the case of the Cape up to £16 7*s*. 6*d*., in the case of the other provinces. It was felt that this new basis would not be so subject to sudden fluctuations as the former, but would be more or less commensurate with normal growth. Though this subsidy was calculated on an educational basis (presumably because education involved about 70 per cent. of the provinces' expenditure), it was not earmarked for education as such. It was merely a contribution to the general revenue of a province out of which it paid for all its services.

The Economic Depression

Things went fairly smoothly on this new basis until the economic depression came. Soon the provinces—notably the Orange Free State and the Cape Province, which are largely dependent on agriculture—found themselves in financial difficulties. What made things worse for a province like the Orange Free State was that it had borrowed considerable sums of money from the Union Treasury to meet not only capital expenses, but also the accumulated deficits on its current expenditure. The deficits grew larger and larger until it found itself absolutely unable to pay its commitments. The Union then stepped in and took over the entire financial responsibility and control of this bankrupt province. The Cape was also faced with deficits, but had not reached quite the stage of bankruptcy into which its less fortunate sister province had sunk. It goes without saying that in the meantime the provinces tried to economise wherever they could, including education. Teachers' salaries were cut, staffs were reduced and there was very close scrutiny of equipment and buildings, expenditure being allowed only when it was absolutely necessary.

In spite of all these efforts the Union Government began to realise that the financial situation, particularly of the two poorer provinces, had become impossible. It would not do for them to go on in the way they were doing, simply running into debt because of the assured assumption that the Union Treasury was always there to come to the rescue. The matter had to be put straight. In a way the position of the poorer provinces was not an enviable one. On the one hand, they were (due to the bad times) faced with a terrible shrinkage of their internal revenue. On the other hand, the people, and especially the teachers, would not stand for a corresponding shrinkage in such an important service as primary and secondary education—particularly at a time when on all sides the slogan was taken up that the only real, long-sighted solution of the country's social and economic difficulty was more education and better education.

Appointment and Dissolution of the 1932 *Commission*

The provincial system, therefore, came in for a good deal of criticism and in many parts of the country the cry was started: Abolish the Provincial Councils. Even those who favoured a reconstruction were, however, chary of advocating total abolition of the provincial system before they knew what was to take its place. To centralise everything under the Union Government savoured too much of Prussian bureaucracy and was not to be thought of. The Government, therefore, in 1932 appointed a Commission to devise a substitute system of administration and local control, in case it was decided to abolish the existing provincial system. In the meantime, however, there were complications of a (party) political nature and public opinion and the press veered round to the view that the provincial system was not so bad after all.

Then at the beginning of 1933 came an entirely unexpected change in the political arena, the formation of the coalition between the Nationalist and South African Parties. The latter party, under the pressure of Natal (which was largely English and afraid of being swamped by the rising Afrikanderdom), had pledged itself to maintain the provincial system, and when it entered the Coalition made the continuance of that system one of the terms constituting the basis of co-operation between the two parties. By this step the position of the Provincial Councils to control education-other-than-higher was immediately assured, because that function constitutes the *raison d'être* of those bodies. If education be taken away, no one in his senses would ever think of advocating the maintenance of such an expensive administration merely to administer the few remaining functions (e.g. roads and hospitals, which had by this time become more and more matters of national, i.e. Union, concern). Once committed to this policy, the Government had no other alternative left to it but to dissolve the above-mentioned Commission.

The Provincial Finances Commission

In the meantime, however, the financial difficulty of the provinces was not cleared up. A second Commission was, therefore, appointed, viz. the Provincial Finances Commission, under the chairmanship of Mr. J. de V. Roos, former Auditor-General of the Union. It began its work in the middle of 1933 and is expected to report by the beginning of 1934. Its terms of reference are as follows :

(1) To examine and report upon :

(*a*) the financial relations at present existing between the Union and the Provinces, more especially in respect of the sources of revenue available to the Provincial Administrations and the basis of subsidy payable to them by the Union Government, and

(*b*) upon the present financial position of the several Provincial Administrations ; and

(2) to make recommendations as to whether any changes should be made in those relations, having regard to the powers and functions at present exercised by the Provincial Administrations, and to such further powers and functions as could more appropriately be discharged by them within the framework of the South Africa Act, 1909.

The question may be asked, what this whole problem of provincial finance has to do with education. The answer is, everything. Experience in South Africa has shown that in nearly every case educational policy has been dominated by financial considerations. That is why I am devoting so much space to this problem of provincial finance, but, for obvious reasons, I do not wish here to attempt to anticipate the recommendations of the Provincial Finances Commission. All I can say is that they will profoundly affect educational policy in South Africa, whether they are consciously planned to do so or not.

Three Principles of Future Policy : Organic Unity

In order to give some indication of the precise nature of the problem which is facing South Africa at the present moment I wish to enunciate three general principles which I feel must be taken into account if anything like a solution of this problem is to be found :

(1) The first principle is that the system of State education of a country such as South Africa (which is a Union and not a Federation) should constitute an organic unity and should, moreover, be determined by a national policy of education which contemplates the system as one organic whole in relation to the nation's needs.

This is a point which the 1915 Commission on Provincial Finance stressed and one which was again brought home forcibly to the Education Administration Commission of 1924. This latter commission was struck by the wasteful overlapping and the lack of co-ordination of educational effort in the Union. The main feature of its recommendation was, therefore, that a " Union Board of Education be established to co-ordinate the educational work of State-provided and State-aided institutions within the Union over the whole range." This proposal was not carried out. Even if such a board had been constituted it would have proved ineffective because, as long as the provinces retained their " sovereign " powers within their own domain, any resolutions or recommendations which such a board made would be merely so many *pia vota*. If it suits a province, it may conform ; if not, nobody can compel it.

Administrative Control Proportionate to Financial Responsibility

(2) The second principle is that power of control should be more or less commensurate with financial responsibility. It is against all sound principles of public administration (whether of education or any other service) that the authority which contributes the greater proportion of the funds should have no say whatsoever in the policy determining those services, while the authority which finds merely the smaller balance should have absolute control. This principle should apply *mutatis mutandis* to the administrative functioning of all types of authorities, whether they be national, provincial or local. In the first instance, the financial responsibility of the Union or nation should be confined to the equalisation of educational opportunity between the provinces and, commensurately, control should be limited to those aspects only which affect the nation generally. In the second instance, the provincial authority should equalise educational opportunity and stimulate local effort within its own boundaries. And so on downwards. Throughout, this principle will operate in such a way that responsibility will become more specific by degrees and control commensurately more detailed as one proceeds from the national authority to the purely local one.

I consider these two principles of cardinal importance for a type of political organisation such as we have in the Union of South Africa. And it is in their violation (a violation which was the direct outcome of the compromise made at Union) that I find the source of most of the troubles which we have to-day in provincial (i.e. educational) administration and finance.

Equality of Educational Opportunity

(*c*) The third principle (already suggested above) is that a system of educational finance should be planned so as to provide equality of educational opportunity as far as possible to every child in the Union, irrespective of geographic location or economic condition. It is just here that the poorer provinces, by their participation in the pooled resources of the Union, have managed to achieve during the last two decades such a notable advance in education—an advance which would otherwise have been impossible. By Union the richer provinces have helped to bear the burden of the poorer. To what an extent this is taking place to-day may be gathered from the following few figures.

I have calculated that, while less than 6 per cent. of all the revenue collected in the Union (from central, provincial and local sources) comes out of the Orange Free State, she receives from the Union in the form of subsidy (including assigned revenue) about 12 per cent. of what is allocated to the provinces in that way. The Orange Free State, therefore, gets twice as much as she gives. The Cape Province is in a similar position, though not quite as bad. She gets about 41 per cent., whereas she gives only about 35 per cent. The position is reversed in the case of the wealthier provinces. Natal contributes just a little more than she gets. She gives about 13 per cent. and receives 10 per cent. The Transvaal contributes about 46 per cent. of the Union's revenue and receives only 37 per cent.

Another indication of the difference in ability to pay between the provinces is found in the figures of taxable income *per capita* of European population in the four provinces (which are for 1931, when the last European Census was taken). The figures are: Natal, £48; Transvaal, £34; Cape, £26; Orange Free State, £16.

Dangers of Provincialisation

Now, if South Africa were to drift towards the Federation idea rather than in the direction of closer union (as a number of people who are to-day so fervent in their advocacy of the rights of the provinces seem to hope)—and if not only primary and secondary, but also vocational, technical and university education were entrusted to them as well as some other important functions, then I see but a dismal future ahead for the two poorer provinces. Indeed, if they were thrown largely, if not exclusively, on their own resources (as such a move towards the granting of greater powers to, and the consequent assumption of greater responsibility

by, the individual provinces would naturally imply) there would be a rather terrible set-back in the educational development of the nation as a whole. The richer provinces will then go ahead unconcerned with the predicament of their poorer neighbours. This to my mind would be fatal from the point of view of maintaining a consistently high educational level amongst the European population of the Union, not to mention even the Native population, which is very unequally distributed—a fact which would make the burden of responsibility as regards Native education press very unequally on the different provinces. Such a step would, it seems, undo much of the sound work which the formation of Union has made possible during the last twenty-three years.

Subsidies according to Need

Another point to be kept in mind in connection with the application of this third principle is that, not only have these poorer provinces less resources to draw from, but their need is relatively greater. They are the provinces with relatively large sparsely populated areas where the provision of education is a very costly matter. The density of the European population per square mile is 5·5 in the Transvaal, 4·5 in Natal, 4·1 in the Orange Free State and 2·6 in the Cape. It is, indeed, here that the present basis of subsidy (under the Financial Relations Act of 1925) broke down. There is no doubt that the basis of paying subsidy per pupil in attendance was a great advance on the previous bases, but the way the different rates of subsidy were arrived at for the four provinces was simply to take an average of what these provinces actually spent per pupil in attendance during 1920–1 and use that as a basis for the future. A province like the Cape, which had had rather cautious Scotsmen as Superintendents of Education and where teachers received relatively low salaries, was penalised, whereas a province like the Transvaal, where there was generally more money to spend on education, reaped the advantage of its generosity, if not extravagance. In short, the *status quo* was taken as a basis, instead of the relative need.

To devise a subsidy formula, therefore, which will take into account the real educational need of the different provinces as well as their relative ability and willingness to provide for their own education is the task which faces the present Provincial Finances Commission.

Whatever system of finance and correlative control may be devised by this Commission, one thing seems clear; that only by the recognition of the above-mentioned three principles will this system be able to serve the best interests of the education of the South African child.

III. Teacher Training

The next important problem which is exercising educational authorities in South Africa at the present moment is the question

whether teacher training should continue to be conducted by the Provincial Education Departments in their own Normal or Training Colleges, as a form of " education-other-than-higher," or whether it should definitely be classed as " higher education " and become *ipso facto* a matter of Union control. The latter alternative is supported on several grounds. I mention a few.

Arguments for Transfer of Training Institutes to the Union

1. *Character of the Institutions*

In view of the fact that teacher training has now for a number of years been a form of education exclusively of a post-matriculation nature, requiring a standard of instruction more or less of a university level, it would be more in keeping with the original intention of the Act of Union if such training could be classified as " higher education " and be administered by the same authority which controls the universities. This would not necessarily imply that all such training be given at the universities, though most of it could conveniently and effectively be cared for in that way.

2. *Economy*

It would be more economical. At present the provinces maintain seventeen training institutions of their own, the majority of which are situated in the same towns as the university institutions. The latter have education faculties with about 600 students in training. Some of these provincial institutions are very small. For example, the Cape Province has eleven training colleges, the majority of which have less than 100 student-teachers each. There is, therefore, considerable duplication and overlapping, and it has been felt that an amalgamation of training colleges with university education faculties, where these are situated in the same town, and the centralisation of the remaining ones at a few centres would not only be more economical but would increase the effectiveness of the training.

Additional force is lent to this argument by the circumstance that it is the Union which subsidises the provinces *ad hoc* for their teacher training. The Cape and Natal receive an annual grant of £60, the Orange Free State £66 and the Transvaal £70 for every student-teacher. And it is only by this very liberal support that the provinces are able to maintain institutions at this relatively uneconomical rate. On the other hand, the State grant to universities amounts to only £50 per full-time student, on an average for all faculties. In comparison with the cost of faculties, like medicine and engineering, which are included in the above figure, that of education is relatively small and the cost to the State of training a teacher at the universities will be considerably less than £50 a year. As a matter of fact, I have calculated that at the Universities of Capetown and Stellenbosch, where they have fully

equipped education faculties for the training of both primary and secondary teachers, it costs only about £30 a year to train a teacher. After all, it is contended, the money comes out of the same taxpayers' pockets, and why should the State pay from £60 to £70 to train a teacher at one type of institution when it can be done for £30 at another ?

3. *Type of Student*

In the third place, the universities attract on an average a higher level of student, intellectually and socially. I found from a survey of teacher training made in 1930 that there was about twice as high a percentage of first-class matriculation candidates in the education faculties of the universities as in the provincial training institutions. Moreover, the universities draw one and a half times as many student-teachers from the learned professional class as the training colleges. The percentage drawn from the farming population is about the same for both. The circumstance that students in the provincial institutions are subsidised by means of very generous bursary loans from the Department, while the university student has to meet his own expenses on a par with the students for other professions (law, medicine, engineering, etc.), has a good deal to do with the type of student that is attracted. This point of selection is a very important one to consider with a view to the maintenance of the prestige of the teaching profession.

4. *Prevention of Inbreeding*

There has been a tendency in recent years for the provinces to give preference to their own products—largely because they wish to recover their loans. This is done by deducting a certain amount from teachers' salaries after they commence teaching. It has been felt that the setting up of barriers of any kind which make the interflow of teachers from one province to another difficult would lead to inbreeding of talent and to narrow provincialism. Union control of training and certification would, on the other hand, do much to foster a more national or Union outlook amongst the teaching profession.

5. *Advantages of University Training*

Lastly, the wider cultural and social contacts which university life brings with it are regarded as invaluable for the teacher. To this point we shall return later.

Arguments against Transfer

The Provincial Authorities on the other hand have opposed Union control of teacher training chiefly on two grounds.

1. *Interdependence of Teacher Training and Primary School Education*

They contend, in the first place, that if they have to administer primary and secondary education they must have power to determine

the nature of the training to be given to the teachers whom they are to employ, as well as regulate the supply according to the demand within their own boundaries. This contention would apply chiefly to the training of primary teachers, because secondary teachers have since 1913 been trained by the universities and their supply has all along been regulated more or less automatically by the demand.

2. *Criticisms of University Training*

In the second place, some provincial authorities have stated that the professional training given at the university institutions is not satisfactory. It is too theoretical and not practical enough. This in spite of the fact that most of the important positions in primary and secondary schools are to-day held by university trained men. They contend, further, that university institutions do not have on their staffs sufficient people who have had adequate experience in primary school work. While this is true of some of the smaller university institutions where the education staff is very small, it is hardly true of all. Some of the university faculties of education, e.g. at Stellenbosch and Capetown, are well equipped for primary as well as for secondary training. They have on their staffs members who had been heads and assistants in provincial training colleges and whose experience there had been exclusively in primary school work. And as a matter of fact the actual practice teaching which students must do in the schools during their period of training at the University of Capetown, for example, is more intensive and extensive than that which is required from students at the Provincial Training College at Capetown.

The Normal College *versus* the University: the Transvaal Experiment

This controversy about teacher training has been going on for a number of years. Recently it has been brought to the front by the action of the Transvaal Education Department which, in the first place, removed all the salary advantages which a university degree brought with it and, in the second place, instituted only one teacher's certificate in place of the 2nd- and 3rd-class certificates which had hitherto been awarded. Many teachers managed to take both a university degree and the 2nd-class certificate in four years. Now that has been made impossible. The training for the new Teacher's Diploma, which will be awarded for the first time in 1935, consists of one year's academic training at a university and two years' professional training at a Normal College. The academic course must comprise five subjects on a first year B.A. level: (*a*) one of the two official languages, (*b*) a science, (*c*) history or geography or mathematics, and (*d*) any other two university subjects. A student must pass in at least three of these subjects before being allowed to proceed to the professional part of his training at the Normal College. This consists of work in Afrikaans

or English, child psychology, theory of teaching, history of education, practical teaching, physiology and hygiene, penmanship and blackboard work, two handicrafts, music and drawing. Bible history and physical training are given but not examined. After leaving the Normal College the student teaches on probation for one year. If that is satisfactory, he receives the Transvaal Teacher's Diploma. During the three years he receives a liberal bursary loan which covers nearly all his expenses.

Criticism of the New Transvaal System

As a training for primary school teaching this is undoubtedly of a high standard, particularly when one compares it with what is required in other countries. Graduate students are also admitted to the professional course in the Normal College provided they have taken the right combination of subjects for the B.A. or B.Sc. While studying for B.A. or B.Sc. the student receives no bursary loan and, in view of the fact that no salary advantage accrues to him later by virtue of having graduated at a university, the chances are that very few will take a degree. Both the high schools and the universities view this situation with alarm. On the one hand, they feel that it will mean that the percentage of graduate teachers will decline, and on the other hand one year's academic work at a university is of very little value—as the student fresh from high school is only finding his feet then, and such first-year work becomes of value really only if he continues to study the subject at the university for another year or two. Instead of being allowed to do that he is taken away from the university and for his second and third year cloistered off in a Normal College, which is a very small institution and where he mixes only with others of his kind. Then, too, it is very unlikely that a graduate of a university will go for two years' post-graduate study in education in such an institution where he will have to sit most of the time with ex-first-year students in the same classes and where he will lack that stimulus and inspiration which comes from associating with advanced students and professors at a university. These Normal institutions have to be run on a very low quota of students (in order to keep the supply down). Consequently it is hardly likely that they will be able to pay salaries which can compete with those of university professors, and they are therefore not likely to attract on the whole the same calibre of instructor as the university.

Then too the universities contend that it is greatly to the advantage of the future teacher to associate with students in other fields of intellectual endeavour. There they get a better chance to see themselves in true social perspective. There they learn to co-operate in the various student activities with the aspirant doctors, lawyers, engineers, etc., just as they have to do in after-life when they get out. When cloistered off in a separate institution they may tend to develop attitudes which make social co-operation in

their future careers very difficult, because they may have either exaggerated ideas about their own importance or the other way about. Then, too, being cloistered off like that in an institution where everybody completes certain circumscribed studies, the feeling is apt to arise that their education has been completed, that they are finished products, having reached the limits of what there is to be known. In such small institutions future teachers are more likely to miss the ideal set up by the late Dr. Becker, former Minister of Education for Prussia, when he pleaded for the transference of all teacher training to university institutions :

> " The most precious endowment which the period of training can bestow on a teacher is not a mass of knowledge or learning, but rather a hunger therefor. We want to create in our teachers a yearning, always unfulfilled but irrepressible, for their own self-improvement and the improvement of the youth entrusted to their care. Real culture does not consist in having heaped-up masses of knowledge, but rather in that respectful disposition of mind which comes from acknowledging the difficulties of the task of knowing."

New Functions of Primary Education

Of course, the Provincial Departments have usually regarded the value of this participation in the wider university atmosphere as very problematical. To them routine and technique are all-important and they consciously set out to train for that.

It seems, however, to us that to argue that this wider culture is merely a frill and that what we want are teachers who are merely routine perfect in all the devices of teaching children to read and write and spell and cipher is to make a grave error. None will deny that the latter is important, yet unless the teacher can do more than merely teach a few isolated skills, he will but ill-equip the modern child, who is faced by the most exacting problems set him by our complicated modern industrialised life. Education can no longer be a static thing as it was under the patriarchal régime when life was to a large extent static also. 'It must become highly dynamic in order to meet the rapidly changing demands of our modern civilisation. Consequently it follows that the teacher who is merely a routine-perfect creature and lacks the knowledge and imagination to interpret to growing children this vastly intricate thing called life will fail to make his education really dynamic. The whole viewpoint of education has changed under the new era.

Formerly the mastery of a few isolated facts and skills was sufficient for effective adaptation, but now a much broader background is needed. It is only when teachers themselves have that genuine scientific attitude towards life that they can hope to develop in their pupils that power of adaptive intelligence, the lack of which we found, as a result of the Poor White Survey in South Africa, to have been the outstanding defect which caused the start and growth of Poor Whiteism—during a period of rapid economic transition when rapid adjustment was at a premium and when a

rigid clinging to traditional reactions proved the economic undoing of thousands.

The whole argument in favour of the university standpoint resolves itself into this: that while it is possible for a university to develop its education faculty in such a way that it could also provide everything needed in the line of primary training, even to the minutest skills of the primary school, just as well as any training college, it has the additional advantage of providing those wider social and intellectual contacts which a small training college could never achieve.

The University Education Department as a Centre of Co-operation

If ever the university institutions should take over the bulk, if not all, of the training of teachers they will have to see to it that they make adequate provision for the training of primary teachers. What is more, a definite scheme of co-operation between the universities and the Provincial Education Departments must be developed by which the latter will have representation on the education faculties and have a say in the preparation and examination of the teachers whom they are to employ in the future. This could be done with the use of a little goodwill and common sense on both sides. In fact, something after this style has already been in operation for a number of years in the University of Capetown, where not only the Provincial Education Department but also the Teachers' Associations (i.e. the headmasters in whose schools the practice teaching is to be done) are represented on the Faculty of Education.

Closer association of all types of teacher training with the university will, it seems, have also the advantage of lending that prestige to primary school work which it deserves. After all, a medical doctor has during the course of his training at the university to learn to tie an artery and other similar little manual skills. In comparison with these, the skill of being able to teach the elements of reading, writing and arithmetic to a young child is a vastly more complicated affair, requiring a knowledge *inter alia* of the psychology of elementary school subjects which has been exercising some of the acutest intellects in university work for many years. The work of Prof. Edward L. Thorndike, of Columbia University, is an example of the type of study I have in mind in this connection.

And, finally, closer association with the university of all types of teacher training will remove that gulf which exists (fortunately not very strongly in South Africa) between the primary and the high school teachers and will thereby greatly enhance the prestige and solidarity of the teaching profession.

IV. Miscellaneous Events

Most facts and figures covering one or two years are merely indications of normal growth such as one would expect in any educational system. They are not usually of much value or interest

to the general reader. I have, therefore, preferred to give in the foregoing rather a general picture of the main problems which are worrying us to-day and to indicate the main lines on which a solution is being sought. Still, there are a few events which may be mentioned. The main ones are direct and indirect results of the economic depression and consequent economies. As has been indicated before, teachers' salaries were reduced by 5 per cent. in 1932 and leave allowance considerably curtailed.

Native Education

Native education, which was fully described in the YEAR BOOK for 1933, has continued to suffer severely as the result of the shrinkage rather than the growth of the Native Development Fund (rather ironically so called). There has been a cut of 10 per cent. in the salaries of native teachers. The natives continue to press for education, with the result that classes are hopelessly overcrowded. At Fort Hare, the university institution for natives, the Higher Teacher's Diploma, i.e. one year after B.A., has been instituted. A new orthography has been standardised for a number of native languages (Tsoana), resulting in a modification of the textbooks used in the schools.

European Education

The Transvaal, in spite of the fact that its subsidy from the Union has been reduced to the rate obtaining for the Cape Province, has now found it possible to give effect to the measure described in the YEAR BOOK for 1932, raising the standard limit of compulsory education from Standard VI to Standard VIII. This has led to the establishment of Junior High Schools. The Orange Free State is introducing its own Junior Certificate Examination (Standard VIII). Formerly it always entered its pupils for the Junior Certificate of the Joint Matriculation Board. In 19 primary schools in Natal pupils are allowed to attend so-called ex-VI classes. These are pupils who are not able to afford to go to high school and having no employment may be kept out of mischief by continuing in the primary school. From August 1932 Natal has been steadily eliminating the under sevens as a measure of economy.

Natal is also contemplating a slight change in its teacher training. Its lowest certificate could usually be attained by one year's academic study followed by one year's professional training. Now the order has been reversed. Natal has also introduced new certificates for teachers in Indian schools.

Recent developments in university education, especially the language medium question, are fully described in the chapter in Section IV below on the universities in South Africa.

The Poor White Problem

The report of the Carnegie Commission which investigated the Poor White Problem in South Africa appeared towards the end of

1932. The investigation lasted four years and its findings have attracted a good deal of attention. It is felt on all sides that the only long-sighted solution of this social problem will be education—education for *control* rather than for *escape*, as it has so largely been in South Africa—and an education which will also compensate children for the deficiencies of their environment. There is a steadily increasing demand for more vocational and agricultural education on the one hand and for an increase in the level of general school education on the other. There is a difficult demand to meet in view of the unsatisfactory financial condition of some of the provinces.

This Poor White investigation has, on the university level, also emphasised the need for a closer study of the social sciences and of the general problem of the social and economic adjustment of a small white population living in close contact with a large black and a smaller coloured population.

E. G. MALHERBE.

CHAPTER SEVEN

IRISH FREE STATE

I. Recent Events

TIME alone can decide the relative importance of the two main lines of development in that part of national education which is controlled or supervised by the State. The two main lines of development are those leading to a complete system of vocational education and to a revival of the Irish language. The language revival is, of course, mainly of local importance, though probably of more than local interest, but in developing vocational education the Free State is working along lines familiar to educationists all over the world.

Longer School Life versus *Vocational Training*

The Free State, as many another country, has had to face the problem of what to do with young people between the ages of 14 and 16. The primary schools are willing to keep pupils up to 16 years of age, and the Minister for Education has been asked more than once to exercise the power given him by the School Attendance Act of raising the leaving age in areas in which he deemed a longer schooling likely to be useful. But the Minister has never exercised this power, and since the passing of the Vocational Education Act the likelihood of his ever exercising it has become very faint. The educational authorities are convinced that the teaching of children beyond 14 years of age ought not to be entrusted to "general practitioners"; and some of them would like to see specialists employed in the teaching even of younger children. It is, of course, a fact that a teacher who has had a good general education can prepare pupils for university entrance, but it does not follow that a well-educated teacher in a primary school can prepare for the technical school, the goal which the authorities would like a large proportion of primary-school pupils to have in view. Hand and eye must be trained while such training is possible; and this kind of training cannot be had in the primary school. Too many pupils leave school, even now, for blind-alley employment.

The Vocational Education Act

The Vocational Education Act is largely the outcome of the deliberations of a commission appointed in 1926 "to enquire into and advise upon the system of technical education in Saorstát Eireann in relation to the requirements of trade and industry." The chairman was Mr. John Ingram, the present head of the technical branch of the Department, and of his eight colleagues two were from overseas—Professor Rohn, of the Polytechnicum, Zürich,

and Herr Nils Fredriksson, of the Swedish Board of Education. The evidence of these foreign experts was of great value, and the recommendations of the commission reflect to a considerable extent Swiss and Swedish solutions of the problems connected with continuation education. The Vocational Education Act, which embodies so many of these recommendations, authorises the establishment of education committees in the vocational education areas of the country, that is, in the county boroughs, the urban districts and the counties. These committees replaced in 1930 the old technical instruction committees. They have considerable powers : they can, for example, acquire land, and they may accept educational endowments ; they appoint and dismiss teachers, and draw up schemes of instruction. But they can do these things only with the approval of the Minister, who has the power of setting them aside and of carrying on their duties through a nominee of his own. This power has once been exercised.

The Apprenticeship Act

The Vocational Education Act was followed in 1931 by the Apprenticeship Act. This, too, is operated by local committees, the members of which represent in equal proportions employers and employees in " apprenticeship districts," and may include three nominees of the Minister for Industry and Commerce. The committees are empowered to make rules dealing with the length of the apprenticeship period, the wages to be paid to apprentices, apprentices' educational qualifications and facilities for continuing their education. The committees may order apprentices to attend educational courses provided by the local vocational education committees, and it is the duty of all employers to give their apprentices the necessary time without deducting anything from their wages or adding to their hours of employment. Every apprenticeship committee must keep a register of the apprentices in its district.

The Irish Language

The article on the Irish language by Prof. O'Briain, which appeared in the YEAR BOOK for 1933, gives in a short space a brilliant history of the fortunes of the language. There is nothing in the country's education which so easily excites enthusiasm (and, in some circles, causes such discouragement) as the efforts to revive the language. The present Government has gone beyond its predecessor in extending the limits within which the teaching of Irish is compulsory. All primary-school pupils are taught Irish, and a regulation has recently been made by which Irish must be taken by pupils at the entrance examination for secondary schools. Without Irish the pupil is refused recognition by the Department, and the school loses the capitation grant which would otherwise have been paid on his account. Few schools are in a position to forgo such

assistance. Another regulation has excluded from the Certificate Examinations pupils who have not Irish among their subjects. Till recently many pupils for whom the study of Irish would have been a waste of time used the Certificate Examinations as a valuable test of progress. The rules prevented them from passing, but the publication of the results showed them and those who were interested in them what they had done, and many of these unsuccessful candidates did brilliantly.

II. The Teaching Profession

Professional status seems to be among the *desiderata* of the teachers—of the lay secondary teachers, at any rate ; the primary teachers appear likely to be satisfied with Civil Service status. But professional status is probably beyond the reach of all classes of school teachers. There are in the Free State at least two great obstacles to its attainment : the indifference of the public to education and—a more serious one—the numerical weakness of the teachers who desire it. The majority of the secondary teachers, being celibate clerics, have neither social ambition nor financial anxiety to urge them to unite with their lay colleagues in an attempt to set up an independent profession ; the Protestant heads of schools enjoy a satisfactory social position and adequate (though modest) salaries ; and their assistants are either looking forward hopefully to headships or have already enough to do in the day's work and in making some provision for old age.

Compulsory Employment of Registered Secondary Teachers

Whatever status they may have in the distant future, it is certain that the secondary teachers are rapidly gaining some of the qualifications of professional people, such as skilled and specialised knowledge. The number of university graduates (and undergraduates) who use school teaching as a stepping-stone to what they regard as higher things has become in the Free State very small. A register of intermediate school teachers has been in existence since 1914, and the Department of Education insists on the employment of a certain number of registered teachers in every school which claims capitation, laboratory or other State grants. In a school in which there are fewer than 50 " recognised " pupils, one registered teacher is required ; where there are more than 49 recognised pupils but not more than 80, two registered teachers must be employed ; and so on, each succeeding group of 30 recognised pupils requiring an addition to the registered staff. A " recognised " pupil is a pupil between 12 and 20 years of age, who has made at least 130 attendances during the school year, and who, as a junior or a senior pupil, has followed an approved course, which in practice means one of the courses laid down for the Intermediate or for the Leaving Certificate Examination.

The Registered Teacher : Qualifications and Salaries

One of the reasons for the Department's insistence on the employment of registered teachers is that the regulations of the Registration Council have made registration a guarantee of worth. To obtain registration the applicant must have (*a*) a degree of a recognised university or a diploma accepted as an equivalent by the Council with the approval of the Minister for Education ; (*b*) a Diploma in teaching ; and (*c*) he must have had three years' teaching experience in an approved school, or two years' experience in the training school of a university or college with one year's teaching experience. And, when registration has been granted and a post has been obtained, the teacher is still under surveillance. His work is reported on by the Department's inspectors, and, if the report is satisfactory, he receives a note in Irish signifying the Department's approval. On the other hand, the State does what it can to secure for teachers fair treatment from their employers. It requires of applicants for capitation and other grants a guarantee that the registered teachers employed shall have a contract of employment terminable upon three months' notice in writing and entitling them to the minimum salary. (It is to be feared that in some cases the State's good intentions on behalf of the teachers are frustrated, despite the wording of the regulations.) And besides trying to secure from the school authorities minimum salaries for the registered teachers employed, the State makes (to men teachers) incremental payments of £12 for ten years and £15 for six years, so that in sixteen years a man may be entitled to receive £210 in addition to the salary paid by the school. Women teachers are given twelve annual increments of £10 each. Special increments of £20 are given for two years to teachers holding honours degrees (or equivalents) ; and to teachers who teach Irish and some other subject or subjects through Irish sums of £15 or £30 may be paid in addition to increments. Lastly, the State has established a superannuation scheme, to which the teachers, the schools and the State contribute.

Training of Primary Teachers

While the State does nothing, beyond holding out the prospect of incremental salaries and pensions, to induce young people to qualify for the secondary teaching service, it bears almost the whole expense connected with the training of the primary, or national, teachers. And, in recent years, it has added enormously to this expense by its efforts to make Irish a living language in the school. For this purpose it has established seven preparatory colleges—three for Catholic boys, three for Catholic girls, and one, Colaiste Moibhi, for Protestant boys and girls. Accommodation for about 670 pupils has been provided. The entrance age is about 14 years, but in the Fior-Gaeltacht (the intensely Irish-speaking districts, as the term is officially translated) the upper age-limit has been raised from

15½ to 16½ years. Another concession (severely criticised by the national teachers) reserves 60 per cent. of the vacancies in the colleges for Gaeltacht candidates who obtain 85 per cent. of the marks given for oral Irish.

In the colleges the language of work and play is Gaelic (but English is among the subjects taught). Entrance to the colleges is obtained by examination, and the courses last about four years. Half-way through their course the students are tested at the Intermediate Certificate Examination, the first public examination for secondary-school pupils; for one of the notable advances made in recent years has been the insistence of the authorities that all intending primary teachers shall have a secondary education. At the end of the preparatory-college course students are tested in oral Irish, oral English and music (girl students having to pass, in addition, an examination in needlework); and those who pass this test are admitted to the Leaving Certificate Examination, success at which secures admission to a training college. Hitherto the preparatory-college candidates at the Certificate Examinations, though remarkably successful, have been successful in courses which, judged by the subjects included, not by the standards reached, have differed little from primary-school courses; but this limitation has been tolerated merely as a temporary expedient, and already Latin and French are being introduced into the curricula of the colleges.

Salaries of Primary Teachers

The State has made itself responsible for most of the cost of educating and supporting the 670 preparatory-college students, and by its grants to the privately owned training colleges it goes far towards paying for the remaining two years of the students' preparation. An increasing number of the students go on to the university and take degrees in Arts, the possession of which entitles teachers to salary bonuses. The initial salary of a national teacher (man) in a school of 30 or more pupils was £170 when the Free State Government became responsible for education; but since 1923 salaries have been subject to a 10 per cent. reduction, and the Public Services (Temporary Economics) Bill of the present year reduces salaries still further. The initial salary now would be about £145. Before the "cuts" took effect, salaries rose by sixteen annual increments of £12 and one of £8 to £370. When the top of the scale was reached, "highly efficient" teachers entered on a supernormal scale, in which salaries rose by five annual increments to maxima varying between £415 and £460 in accordance with the average attendance of pupils. Trained women teachers began with a salary of £155, which rose by fourteen annual increments of £10 and one of £5 to £300. Their supernormal scale brought salaries to maxima varying between £330 and £360. (All these maxima, it will be understood, have been lowered.) The salaries of trained assistants are the same as those of principal teachers in

the normal scale, but in the supernormal scale their maxima are slightly lower. A deduction amounting to 4 per cent. is made from teachers' salaries as a contribution to the Teachers' Pension Fund, to the benefits of which junior assistant mistresses and teachers in convent and monastery schools will in future be entitled. The Pension Fund is at present in an unsatisfactory state, and has been for months a subject of controversy between the Department and the teachers, who claim that any deficit should be borne by the Government, not by them.

Composition of the Primary Teaching Body

According to official figures, 36·7 per cent. of last year's training-college entrants had been preparatory-college students, but 26·7 per cent. entered from ordinary secondary schools in which they had been pupil teachers, and no less than 28·3 per cent. entered by way of open competition. The remaining entrants, 8·3 per cent. of the total, entered on the strength of university graduation or from the ranks of the untrained assistants. It is evident that open competition is still an important avenue to the training college, and comparison with the figures of previous years shows that the pupil-teacher scheme is not less important. But it seems to be expected that open competition will provide fewer entrants as the years go on, and the granting of pupil-teacher posts in secondary schools is likely to depend on an increase in the number of secondary schools in which instruction is given through Irish. The Department has been for some time dissatisfied with the work done in Irish in many of the boys' schools, and consequently with the qualifications of the pupil teachers coming from these schools. The Department accordingly decided last year to confine the appointment of boy pupil teachers to schools in which Irish was the medium of instruction for at least one subject, and, further, to limit appointments to those candidates who did well at the Intermediate Certificate Examination.

Technical Teachers

From a sociologist's point of view the technical branch may be regarded as almost the most important of the branches controlled by the Department of Education. The principle of decentralisation has been applied to it, and to it alone. The school manager who, in the primary system, is usually a parish priest or local rector or minister, and in the secondary system a headmaster or headmistress, in the system of continuation education is represented by a committee appointed by the local authority. Like the school manager, the committee appoints and pays the teachers, but, unlike the manager, it has the right (and indeed the duty) of drawing up schemes of work. Its powers, however, are strictly circumscribed by the Department, which, after all, supplies about two-thirds of the local education funds. The Minister is empowered by the Vocational Education Act to prescribe scales of

salary for the various classes of teachers employed by the committees, and he has effective means of putting an end to cheese-paring economy at the teachers' expense.

The Department took over a " going concern " in 1924, when it assumed responsibility for technical education. The technical schools were for the time well equipped and the staffs efficient. Several of the best teachers had studied at the London School of Economics. But, with the passing of the Vocational Education Act, many new school buildings and a great many new teachers were called for. To get suitable teachers the Department holds examinations (written, practical and oral) of young persons actually engaged in manufacture or trade, and it gives the successful candidates a technical-school training for one year. During the period of training the Department makes the intending teacher a generous allowance, giving him no reason to regret having left the factory for the school. When appointed to a school, the teacher begins with a salary of £130, which rises by annual increments of £10 to £200. A woman teacher gets an initial salary of £120, rising by annual increments of £10 to £170. Cost of living bonuses according to the Civil Service scale are added, if approved of by the Minister for Finance. But all teaching appointments are probationary for a period of two years; and if the appointment happens to be to a post in a Gaeltacht area or to one which is partly in the Gaeltacht, the teacher will not be deemed to have passed his probation till he has satisfied the Minister for Education that he has acquired a competent knowledge of the Irish language.

Vocational teachers, like primary teachers, are eligible for promotion to a class paid according to a higher scale; the salaries of men teachers in this class can rise to £250 and those of women to £200.

Women Teachers

Intending women teachers are naturally attracted to the schools of domestic economy or of housewifery. At Kilmacud, Stillorgan, a few miles from Dublin, there is a residential school under the direct control of the Department, and at St. Catherine's, Blackrock, co. Dublin, a school has lately been opened by nuns of the Dominican Order for the teaching of household management and allied subjects. At Killarney there is a school for the training of girls for domestic service, and secondly, it appears, for the popularising of the Irish language in Irish homes, the Department having decided to confine admittance to the school, as much as possible, to native Irish speakers.

H. R. CHILLINGWORTH.

CHAPTER EIGHT

NEWFOUNDLAND

THE great reduction in the Government grant caused by the present financial stringency has dealt a severe blow to education. During the year 1931–2 the grant of $1,025,565 was reduced to $763,065. It has now been further reduced to $500,000. Thus our whole education grant has been reduced by over 50 per cent. Practically all the educational services have been curtailed. The Normal School has been closed, but provision will be made in the Memorial University College in 1934 for the continuance of this service. The grant of $10,000 which was formerly voted for the Memorial University College and Normal School has been discontinued. The reduction in the grants allocated to the Office of the Bureau, and the offices of the Superintendents of Education, has interfered considerably with the services these offices were rendering the schools and the people. For instance, the Bureau has been deprived of two of its Assistant Superintendents, and it is greatly inconvenienced by the non-publication of its Annual Report.

Cost per Pupil

The cost to the Government per pupil enrolled for the year ended June 30th, 1932, was $12.91; the cost to the Government per pupil for average attendance was $18.19, and the cost to the Government per caput of population for the year 1931–2 (census 1921) was $2.91. The percentage of population attending school was 22·5. There was a decrease in the number of schools last year, but it was not as large as might have been expected, as the teachers accepted a large reduction in salary and the schools were thus kept open. The school year has been reduced very little, most schools being open for the usual school year, September 1st to June 30th.

It is rather interesting to note that the percentage of average daily attendance shows an increase of 1·5 per cent. This increase seems to indicate that parents who made sacrifices to send their children to school made special efforts to send them regularly.

It is also significant that while the enrolment in the lower grades shows a decrease, in the higher grades it shows an increase. The enrolment in the Memorial University College has also increased, there being 191 students on the roll for the year just closed, as compared with 137 for the year 1921, and 158 for 1932.

Recruitment of Teachers

Of late years the educational standard of the teacher has advanced considerably and some of the brightest of the young people were recently beginning to look upon teaching as a career, but the great

reduction in the grant has arrested this most encouraging tendency, and unless more money can be found so that Boards of Education may be able to pay the teachers better, a great falling off in good teaching material is inevitable.

Statistics

The number of schools open for the year 1931–2 was 1,198; the number of school departments was 1,595, the number of teachers employed was 1,680, of whom 576 were men and 1,104 were women, and the total number of pupils enrolled was 59,201, of whom 29,426 were boys and 29,775 were girls.

Vocational and Adult Education

The Manual Training Schools in the City of St. John's are still open and the classes in household science in the City are filled to overflowing as before. This can also be said of the schools which give commercial courses. These schools, while attached to the three leading denominational secondary schools, are in reality private schools, supported, not by public taxes, but by fees from the students in attendance.

The Memorial University College conducted its evening classes from October to May, and the attendance during the past year was 77 as compared with an attendance of 156 the previous year.

In the professional classes in Pharmacy, as well as those in Engineering and Navigation, the enrolment was as good as in former years.

During the past year 17 Adult or Opportunity Schools were operated in various parts of the country, and they were, as usual, well attended and did splendid work. These schools are maintained in a large measure by the Carnegie Corporation of New York, which has contributed generously to our adult education work during the past few years.

The Travelling Library has continued its services, and last year 1,300 books were circulated in 32 centres.

Boy Scout Movement

This Movement is making progress, and there are now 27 Boy Scout troops in the country as compared with 12 in the year 1929.

Conclusion

It is an encouraging sign that the people are more and more interested in the education of their children year after year, and if Newfoundland can emerge successfully from the present financial crisis, there is no doubt but that more money will be allocated for the education of the people in the very near future.

VINCENT P. BURKE.

CHAPTER NINE

British India

IN the YEAR BOOK for 1932 a general sketch was given of the origin of the modern educational system in India, its condition, tendencies and outlook, together with certain statistics.

Effects of the Financial Depression

India, like the rest of the world, has been affected by severe financial depression ; in consequence, there has been a comparative set-back in the quantitative progress of education. Moreover, the new census figures of 1931 have been used for calculation in recent educational tables. Hence, as a result of an increase of 24,670,742 in the population of British India there has been a decline in the percentage of children at school to the total population. In 1931, the percentage was only 4·7 against 5·0 in the previous year.

In the YEAR BOOK for 1933, a more detailed description was given of education in the province of Bihar and Orissa, as being " the poorest, though one of the largest provinces." This year it is proposed to devote special attention to the Punjab, which is one of the richer and more progressive provinces (see pages 782–96 of this volume). The considerable variations in the rate of progress between the different provinces are shown in Tables 42, 44 and 47, on pages 111, 113 and 115. To these may be added the following figures of cost per pupil [1] :

AVERAGE ANNUAL COST PER SCHOLAR, 1930–1

PROVINCE	GOVERNMENT FUNDS	LOCAL FUNDS [2]	FEES	OTHER SOURCES	TOTAL COST PER SCHOLAR
	Rs.	Rs.	Rs.	Rs.	Rs.
Madras . . .	11	3	3·4	4·17	21·68
Bombay . . .	16·27	5·65	5·92	4·21	32·12
Bengal . . .	5·8	1·1	7	2·59	16·5
United Provinces . .	15·28	3·59	4·37	3·55	26·82
Punjab . . .	14·7	3·22	5·45	2·69	26·09
Burma	15·57	10·53	7·96	5·4	39·47
Bihar and Orissa . .	6·23	5·06	3·9	2·7	17·89
Central Provinces and Berar . . .	12·71	7·17	3·73	3·39	26·04
Assam	9	1·9	2·4	1·9	15·2
North-West Frontier Province . .	26·81	4·12	3·12	3·85	37·93
Total—British India .	11·28	3·63	5·1	3·46	23·48

[1] *Include both District Board and Municipal Funds.*

[2] The rupee = 1*s.* 6*d.*; 100,000 rupees = 1 lakh = £7,500; 100 lakhs = 1 crore. Rs.13,67,425 = 13 lakhs and 67,425 rupees.

Thus, in addition to the fact that it records nearly the lowest percentage of pupils at school to the total population in all provinces, Bihar and Orissa receives considerably less per pupil from Government than any other province except Bengal. Moreover, this financial handicap has been further intensified during the present period of financial depression, as during 1930–1 the enrolment in schools and colleges in Bihar actually declined by 19,322 pupils and expenditure by Rs.67,871. In the Punjab, on the other hand, enrolment advanced in that year by 72,465 pupils, and expenditure by Rs.13,67,425. But in subsequent years the Punjab has also encountered the full blast of the financial storm, with the result that there has been considerable retrenchment in educational expenditure and a consequent decline in enrolment. Of all provinces in India, Madras appears to be the most happily placed. In 1930–1, enrolment increased by 70,328 pupils, and expenditure by nearly Rs.76,00,000.[1] Thus it appears probable that the supremacy which Madras has gained in the past over other provinces in education on account of other reasons will be confirmed still further by its more stable financial position.

Effect of Provincial Autonomy

In the pre-Reform days before 1921, when the Government of India played a prominent part in financing education and in defining educational policy in the provinces, these financial inequalities were mitigated to some extent; but, with the steady growth of provincial autonomy, the poorer provinces have had to depend almost entirely on their own resources. Thus, in present circumstances, there must necessarily be a grave lack of uniformity in the speed of educational advance throughout British India, especially in the matter of primary education and in the attainment of literacy. The Hartog Committee were much impressed by this danger, and suggested that the Government of India should not be entirely relieved of all responsibility for the attainment of universal primary education.[2] "In England special measures are taken to finance necessitous areas, and we think it desirable in the interests of British India as a whole that similar means should be taken in this country."

Variations in Provincial School Systems

There are variations other than that of financial inequality between the provinces in their educational development. In the YEAR BOOK

[1] This large figure is explained to some extent by new grants, renewing and non-renewing, to Andhra and Annamalai Universities, but the fact that during the quinquennium 1927–32 the total expenditure (from all sources) on education in Madras rose from Rs.453 to Rs.568 lakhs indicates the comparative well-being of that province.

[2] Review of the Growth of Education in British India by the Auxiliary Committee on Education of the Indian Statutory Commission. (H.M. Stationery Office, Cmd. 3407, 1929, 4*s*. net.)

for 1932 it was explained that the educational systems of India are divided into (*a*) a primary stage of four years, in which instruction is imparted entirely in the vernacular; (*b*) a middle stage of four years, in which English is taught, but not yet used as the medium of instruction; (*c*) a high stage of two years, in which English is mainly used as the medium of instruction and pupils are prepared for matriculation; (*d*) an intermediate stage of two years, which is ordinarily part of a university course; (*e*) a degree stage, also usually of two years; and (*f*) a post-graduate stage leading to the M.A. and M.Sc. degrees. This brief description is of value as a rough indication of the general scheme of education in India as a whole, but it is advisable to make a few amplifications, especially as the provincial systems are now being discussed in fuller detail in successive YEAR BOOKS.

The old-time criticism of Indian education as being of a lifeless uniformity is by no means as fully justified now as it used to be. Since the time when in 1921 the Government of India divested itself of its control over education, each province has tended to develop its own characteristic features; and this tendency will be strengthened in the years to come. There are, however, grave defects which are still common to all provinces.

There are, first, many variations in the actual scheme of education. The length of the course leading to matriculation is by no means uniform; and there are important variations in the distribution of classes between the primary, middle and high stages. Whereas in the United Provinces there are twelve classes leading to matriculation, in a few provinces, including the Punjab, there are only ten classes. This disparity will go far to explain a phenomenon which will be discussed in a later chapter, that Punjab students often enter the university at an even earlier age than elsewhere.

The Vernacular as a Medium of Instruction

In all provinces the present tendency is to postpone the introduction of English as the medium of instruction. It is being realised more and more that, in consequence of the premature use of a foreign medium and of the unfortunate neglect of the vernaculars as subjects of study, only too often are Indian pupils unable to think or to express themselves in any language. It is now hoped that, by postponing the use of the foreign medium, pupils will make more rapid progress in learning the ordinary school subjects, with the result that more time will become available for methodical teaching in English. Recent reports indicate, however, that the extension of the vernacular medium has been followed by a deterioration in the knowledge of English.

[1] Bengal has gone farther than other provinces in using the vernacular medium throughout the school stage, as the medium of instruc-

[1] The gist of this and the succeeding paragraph has been taken from the *Progress of Education in India*, 1922–7, and *Education in India in* 1930–1.

tion in all language subjects is now the vernacular. In Bihar, the regulations of Patna University have been changed so that the vernacular may be used in the senior school classes as the medium in all subjects except English and Mathematics. In Madras, Bombay, the United Provinces and the Punjab the use of the vernacular medium is permissive in certain subjects for the purpose of matriculation.

Alongside of, but not necessarily antagonistic to, the wider employment of the vernacular medium, is the growing demand for more and better teaching of English as a subject. In Bombay, for example, the practice of teaching English in Classes V–VII in primary schools is being extended, and " the growth in the number of these classes is a sign of the ever-increasing demand for English." In many provinces, again, the practice of providing optional English classes in vernacular middle schools is steadily growing, but this is scarcely a beneficial innovation.

Vernacular Schools

The main difference in the provincial systems, however, lies in the neglect or encouragement of vernacular schools. The vernacular system of education differs from the English or anglo-vernacular system, not merely in the medium which is employed, but even more in its objective. Its aim is to provide a sound general education complete in itself, which, if properly regulated, should do much to build up a spirit of leadership and initiative in the countryside. The Report on Village Education in India (1919–20) went so far as to refer to the Vernacular Middle School as " the keystone of the arch of educational reform." The importance and further possibilities of this type of school have also been discussed more recently by a committee of American experts who were particularly interested in the work of Christian missions in India[1]:

> " If we think in terms of the broad educational need, which India shares with the Orient generally, that of bringing its life of thought into more direct relation to the conditions of daily activity, we feel justified in dwelling on the importance of a type of school (the vernacular middle school) which—avoiding a common error of American vocational schools, in which practical training tends to sacrifice the educational ideal—unites vocational with intellectual training, to the advantage of both."

The Committee also pointed out the great value of vernacular middle schools in providing suitable recruits for the vernacular training institutions:

> " What we need for village teachers are not foreigners, nor even the urban, English-trained Indians of the city schools. The one has never had, and the other has lost, the ability to think along the furrows cut by Indian tradition. The need is for young men and women who, having grown up in a village, are used to its ways of living; and who have been given the education of teachers, an education that opens their eyes

[1] *Re-thinking Missions*, Harper Brothers; pages 128–35.

to village and agricultural problems and gives the means of dealing with them. These schools, not wholly neglected by Government or missions, have not as yet realised their possibilities. They seem to us to hold the major opportunity of service to India. They are the narrow neck of the bottle, the avenue through which alone a necessary aid can come to one-sixth of the population of the world. They are free from the necessity of following educational conventions, that hamper other parts of the school system of India. They have unlimited lee-way for experiment."

A similar theme has been developed in a recent book[1] dealing with the same subject :

" What India needs to-day more than anything is a new and wider system of education in the villages, a system which will be capable of expansion, a system which will be in harmony with village conditions and requirements, which will train up boys and girls desirous of remaining a part of the village and of spending lives of service to the progress of the countryside."

It is unfortunate that in many provinces the bias is in the other direction, towards a multiplication of English secondary schools. The Hartog[2] Committee—

" regretted that all sections of the community, with their different occupations, traditions and outlook, and with their different ambitions and aptitudes, have little, if any, choice of the type of school to which they will send their children. In fact, the present type of high and middle English school has established itself so strongly that other forms of education are opposed and mistrusted ; and there is a marked tendency to regard the passage from the lowest primary class to the highest class of a high school as the normal procedure of every pupil."

The Committee went on to urge that—

" even now, if the middle vernacular course were remodelled and adapted to rural requirements, and if the opportunities of rural work and service now open to those who complete that course were more widely realised, then not only would the gravity of the problems confronting anglo-vernacular education be diminished, but rural reconstruction and improvement would be materially assisted."

The undue emphasis laid on the importance and value of English education and the corresponding neglect of vernacular education have resulted in undoubted evils. The English secondary schools, which are located mainly in the towns, are overwhelmed by pupils who have but little aptitude for that form of education ; and, owing to their imperfect grasp of the English language, they are often unable to understand the ordinary subjects, which are usually taught through the medium of that language. Hence the ever-increasing number of students in the colleges ; hence the large proportion of students for whom the dictated notes and so forth are, and can be, the only means of instruction ; hence the ever-

[1] *Christian Education in India*, by Sir George Anderson and Bishop Henry Whitehead, Messrs. Macmillan, page 104.
[2] *Report*, page 104.

increasing unemployment among the middle classes, which is causing such widespread discontent and unhappiness. An equally serious evil is the lure of matriculation, which is sucking from the countryside its best intellect and initiative, and is dissociating the more promising boys and girls from their home-life and its surroundings.

The extent to which the vernacular system is encouraged or neglected will be gauged from the following tables, the one showing the number of vernacular middle schools and the other the number of English or, as they are sometimes called, anglo-vernacular schools in each province.

VERNACULAR MIDDLE SCHOOLS FOR BOYS BY PROVINCES, 1927 [1]

PROVINCE AND POPULATION (IN MILLIONS)	NUMBER OF INSTITUTIONS	TOTAL ENROLMENT	HIGHEST CLASS
Madras (42·3)	1,690	—[2]	VIII
Bombay (19·2)	4,257	—	VIII
Bengal (46·6)	74	4,714	VII
United Provinces (45·2)	626	60,449	VII
Punjab (20·6)	456 1,658	325,871	VIII VI
Burma (13·2)	1,102	71,767	VII
Bihar and Orissa (34·0)	242	25,006	VII
Central Provinces (13·9)	335	59,776	VIII
Assam (7·6)	145	17,209	VII

[1] Hartog Committee Report, *page* 75.

[2] *The figures are not available, as a different method of classification is adopted in these provinces.*

ENGLISH MIDDLE SCHOOLS AND HIGH SCHOOLS FOR BOYS BY PROVINCES, 1927

PROVINCE	MIDDLE SCHOOLS	TOTAL ENROLMENT	HIGH SCHOOLS	TOTAL ENROLMENT
Madras	212	27,583	342	139,477
Bombay	262	19,912	187	68,040
Bengal	1,616	142,684	1,003	238,461
United Provinces	88	10,724	161	59,788
Punjab	218	48,539	301	114,863
Burma	112	17,292	149	40,251
Bihar and Orissa	321	34,009	135	38,197
Central Provinces	156	23,511	49	4,902
Assam	155	13,412	45	15,299

The enrolment figures in these tables should be read with caution. They are somewhat misleading, as pupils in the primary departments of secondary schools are classified as secondary. The method of classification adopted in Madras and Bombay

also differs from that obtaining in other provinces, in that all the classes of vernacular middle schools are regarded as primary. But the statistics convey a sufficiently accurate impression of the relative popularity of the vernacular and anglo-vernacular courses. In Bombay and the Punjab the vernacular system appears to prosper and to be growing in strength ; in other provinces, notably Bengal, it is lacking in vitality. This attitude of neglect must inevitably result in an impoverishment of the countryside, and is a grave hardship to agriculturists, who are mainly Muslims.

The figures regarding the high and middle English schools in Bengal are a necessary corollary to the neglect of the vernacular schools, but it is surprising that there are so many schools of this type in the Punjab, which at the same time is prominent among provinces in its support of vernacular schools. This is due, to some extent, to the deliberate policy of the Punjab Government in providing facilities for English education by the creation of Government high schools in backward areas ; it is due, in a greater measure, to the popularity of communal schools, a matter which will be discussed in greater detail in Chapter Two of Section VI.

Universities

There are also considerable variations in the form of universities in India. There were, originally, the affiliating Universities of Madras, Calcutta and Bombay ; and, later, the Universities of Allahabad and the Punjab. In many ways this type of university was then the best suited to India. The expense of their creation was negligible ; they provided an effective (though perhaps unsatisfactory) means of testing the qualifications of recruits for Government service ; they regulated and standardised the work of the promising little colleges, which were already in existence. Indeed, the early development of the university system in India was far from unsatisfactory. This happy state of affairs might have continued for many years, had not the system become overburdened and indeed broken by the weight of largely increased numbers of students, and also by a rapid increase in the number of colleges, many of which received very little financial support. It was unfortunate, therefore, that the reforms which were carried out at the beginning of the century, during the viceroyalty of the late Lord Curzon, took the form of changes in the constitution and machinery of the universities rather than of a reconstruction of their school foundations.

A desire to effect a more drastic reconstruction of the university system soon became manifest. In 1916, the Hindu University at Benares, which is of the unitary type, was created. But it was primarily the Calcutta University Commission which stimulated the desire for an improved type of university. Since the publication of their report, five new universities have been created in British India : at Dacca, Rangoon, Lucknow, Aligarh and Delhi, all of them

to a greater or lesser extent of the unitary type. Moreover, the old affiliating university of Allahabad has been transformed into a unitary university, and a new university has been created at Agra, which has taken over the affiliating functions formerly exercised by the University of Allahabad. There are now in India eight universities (Calcutta, Madras, Bombay, the Punjab, Patna, Nagpur, Andhra and Agra) which are largely of the affiliating type; and ten (Benares, Dacca, Lucknow, Allahabad, Aligarh, Rangoon, Mysore, Hyderabad, Delhi and Annamalai) which are mainly of the affiliating type. In the Punjab, almost alone of the provinces of India, no attempts have been made either to split up the existing affiliating university, or to create others of a different type. However, a committee to enquire into these matters has just completed its sittings and published a report.

The efficacy of these innovations, however, has been reduced by the continued failure to strengthen the school foundations of the university system, with the result that most universities are overburdened by large numbers of students, who have little or no chance of completing a university course successfully, and on whom

UNIVERSITY ENROLMENT

UNIVERSITY	ENROLMENT			
	1917	1922	1927	1931
I. Calcutta	28,618	23,044	30,202	24,806
Patna	—	2,417	4,817	4,547
Dacca	—	1,030	1,339	1,142
Rangoon	—	507	1,479	1,550
Total	28,618	26,998	37,837	32,045
II. Madras	10,216	12,653	16,922	16,218
Mysore	—	1,460	1,749	2,781
Osmania	—	345	798	808
Andhra	—	—	3,136	3,536
Annamalai	—	—	—	569
Total	10,216	14,458	22,605	23,912
III. Bombay	8,001	8,493	11,411	13,908
IV. Allahabad	7,807	6,445	3,244	1,659
Benares Hindu	—	1,050	1,936	2,419
Aligarh Muslim	—	702	959	923
Lucknow	—	632	1,448	1,709
Agra	—	—	—	2,637
Total	7,807	8,829	7,587	9,347
V. Punjab	6,583	7,372	11,416	17,390
Delhi	—	706	1,310	1,700
Total	6,583	8,078	12,726	19,090

expenditure of money intended for university education is largely wasted. The table on page 366 gives a fairly accurate view of the situation, but for the purpose of comparison the figures are vitiated by the exclusion of intermediate students in some of the universities in the United Provinces, and in Dacca University.

Conclusion

The present stage in the history of education in India is critical. India stands on the threshold of important political developments. She will need more than ever men who have been well and suitably trained for leadership. Again, though literacy may not be essential to the actual recording of a vote, a representative form of government depends very largely for its success on widespread literacy. It is essential that concurrently with the preparation of schemes of political advancement, the educational system of the country should be recast and adapted to the requirements of the new ideas.

G. ANDERSON.

CHAPTER TEN

THE UNITED STATES

Diverse Conditions in the Many Decentralised Districts

ANY effort to present an accurate appraisal of the educational situation in the United States, even in normal times, encounters almost insuperable difficulties. To begin with, one must report, not on one educational system, but on a myriad of systems, organised in the most diverse relationships. There are forty-eight separate state school systems, almost completely autonomous. These state systems in turn are split into some 127,000 local districts or jurisdictions, almost wholly independent administratively, although somewhat circumscribed by the general regulations of the forty-eight states. These numerous local districts vary all the way from those with one school, one teacher, and in some instances only one pupil, to a district with more than a million pupils and 35,000 teachers. Some half-million school board members in the United States direct the work of 850,000 teachers and other school employees.

These tens of thousands of governmental jurisdictions exist for the sole purpose of maintaining schools. They are often independent from, and frequently are not coterminous with, the jurisdictions responsible for maintaining other public activities such as fire and police protection, streets and roads. In the majority of instances the school boards which control these local school districts not only direct the schools, but determine how much money shall be expended for their support—in some instances even collecting the taxes directly from the taxpayers.

Within these many school districts may be found the most diverse conditions. Some employ well-prepared teachers—college graduates or better, while others employ as teachers those who have gone little beyond the elementary school. Some pay their class-room teachers salaries which reach a maximum of $3,000 a year or more ; others pay them less than $400 a year. Some provide school terms of ten months or more ; others have terms of five or six months or even less. Some offer a rich curriculum involving both class-room and out-of-class work. Others provide the most meagre curriculum limited to the " tool " subjects. One can find examples of almost unbelievable extremes in educational provision in practically all the states. An expenditure averaging as much as $300 per pupil per year, while unusual, is actually found in some city school systems. Rural areas spending $25 or less per pupil, while unusual, are far from non-existent.

Thus far we have considered only free, that is, public [1] elementary and secondary schools supported wholly by taxation, which enrol the great mass of children between the ages 5, 6 or 7 and ages 16 to 18. These schools enrol 21,140,000 children in elementary schools and 5,387,000 in secondary schools. There are several additional millions enrolled in privately controlled elementary and secondary schools which are supported by various religious denominations, principally Catholic, or by tuition paid directly by parents.

Above this level are the normal schools, colleges, universities and technical schools, numbering a thousand or more and in 1930 enrolling 1,086,000 students.[2] A considerable proportion of the educational institutions at this level are under public control and are supported largely from taxation, although certain student fees are collected in some state colleges. The remainder are supported from income on permanent endowments, from students' fees or from both these sources of income.

The Present Compared with Previous Depressions

It is too early yet to make a final evaluation of the effects of the economic depression of the last four years. But it appears to be more harmful to education generally than previous depressions.

A recent analysis [3] of expenditures for education in the United States during its depressions of 1837, 1857, 1873, 1907 and 1921, leads to this conclusion :

> " It appears that during the depressions of the past the American states have generally made substantial increases in the total expenditures for public schools. These expenditures have usually more than kept pace with the increases in school attendance, although at the close of some of the longest depressions there have been slight declines in expenditures per pupil. However, any declines in expenditures per pupil have apparently been more than offset by a decline in the level of prices. In terms of actual buying power, the people seem to have actually increased their expenditures for public schools on a per pupil basis during the various periods of industrial stagnation."

No such hopeful report can be made of the present depression. There has been a decided drop in public school support in the past three years. The reductions vary widely between local districts.

Effect of Decentralisation

In fact, the anarchy of localism in the United States which has been described above does not place the schools in a strong position

[1] In the United States " public schools " are those wholly supported by the public through taxation.

[2] Those attending summer sessions, taking courses in extension or by correspondence or attending short courses, would bring this number up to 1,500,000.

[3] Pitkin, Royce Stanley, *Public School Support in the United States During Periods of Economic Depression*, Brattleboro, Vermont, Stephen Daye Press, 1933, page 135.

to meet the present financial emergency. It permits neither the state as a whole to pool its resources nor the several counties of the state to act as units in financing education. Instead, the ability to support education is determined primarily by the economic condition of the individual locality. If the school district happens to be a one-industry town and that industry is hard hit, the schools inevitably suffer. If, on the other hand, the local community rests on a well-balanced economic base, the effect on the schools may not be so serious. As a result, while some districts now find it possible to maintain school facilities on a reasonable tax rate, others are finding it necessary to cut school terms to a few months or to close schools completely.

Equally important, the *per capita* cost of operating many of the tiny school districts is exceedingly high, even though the educational facilities provided are of an inferior quality. A remedy for these restrictions on educational opportunity in the United States would be the acceptance by the state of the responsibility for maintaining a minimum school programme, and the increase in size of the school district both for administrative and financial purposes.

This is not an infallible remedy during periods of severe economic depression, as is shown by the following quotation, taken from the YEAR BOOK OF EDUCATION, 1933, relative to the effect of the financial crisis on education in Australia :

> "A plan common to the whole of Australia has been agreed upon and is now being applied in all the states. Under this plan drastic retrenchment in all government expenditure has been effected, or is foreshadowed.
>
> "It is in times of crisis such as the present that educationists realise one of the weaknesses of a centralised form of educational administration, under which all expenditures are provided out of the revenues of the state. Governments driven to retrenchment turn naturally to a great spending department, and within the education system there are no local authorities or other organised bodies, as in other countries, which can make effective protests when proposals are disproportionate, or are likely to be prejudicial to present efficiency or to future developments. Administrative officers must be loyal to their political chiefs and so their criticism is not heard."

In the United States the highly decentralised organisation of the schools is considered a hindrance in securing adequate school support, while in Australia the same criticism is made of the highly centralised form of educational administration. Apparently, neither a centralised nor a decentralised educational system is immune from the effects of a severe economic depression. It is quite possible, however, that a system in which neither extreme decentralisation nor extreme centralisation exists will fare best.

Present Trends

Among the factors growing out of the depression which have resulted in drastic retrenchment in school expenditures in certain areas in the United States are these : (1) the general hysteria and

feeling of insecurity which have prevailed ; (2) a reaction against anyone whose salary had not been reduced—which in the earlier stages of the depression included the teachers ; (3) the organisation of a large number of tax-payers' leagues—or, as they are sometimes properly called, tax-dodgers' leagues ; (4) the indifference towards the tax-supported school of certain wealthy groups, who send their children to private schools ; and (5) the genuine distress of many tax-payers who have been hard hit by the depression.

The effect of the depression on public education may be summed up as follows :

1. The responsibilities of public education are increasing.
2. The financial resources of public education are decreasing.
3. Educational opportunity is being seriously restricted in a growing number of communities.

Table 1 presents data relative to pupil enrolment, number of teachers employed, expenditures for public, elementary and secondary education, and cost per child enrolled in the United States for the years 1926 to 1933.

TABLE 1

CERTAIN PUBLIC SCHOOL STATISTICS, 1926–1933

YEARS ENDING JUNE 30	TOTAL ENROLMENT	HIGH-SCHOOL ENROLMENT	NUMBER OF TEACHERS, PRINCIPALS AND SUPERVISORS	TOTAL EXPENDITURES	COST PER CHILD ENROLLED
				$	$
1926	24,741,468	3,757,466	831,078	2,026,308,190	81·90
1927	24,960,582	3,834,372	842,654	2,105,322,414	84·35
1928	25,179,696	3,911,279	854,230	2,184,336,638	86·75
1929	25,428,856	4,155,350	867,297	2,250,563,511	88·50
1930	25,678,015	4,399,422	880,365	2,316,790,384	90·22
1931	26,062,749	4,729,000	892,466	2,316,613,523	88·89
1932[1]	26,294,700	5,058,000	897,018	2,188,273,000	83·22
1933[1]	26,526,700	5,387,000	882,018	1,961,900,000	73·96

[1] *The data for* 1932 *and* 1933 *are rough estimates and probably understate the amount of retrenchment, which final figures, particularly for* 1933, *will show.*

Enrolment Decreasing in Elementary Schools and Increasing in Secondary Schools

Table 1 shows no diminution in the steady growth of public-school enrolments. Each year there are roughly 200,000 more children in the public elementary and secondary schools of the United States than the year previous. When high-school enrolments are considered separately, however, a very different picture is revealed. These enrolments have increased in round numbers

from 3,750,000 in 1926 to 5,400,000 in 1933. This increase is much sharper than the increase in general enrolment, and the depression years have tended to accelerate it.

In recent years elementary school enrolment has been decreasing, owing to the declining birth-rate, and other causes. This is especially true in the large urban centres. In the city of Chicago, for example, the birth-rate in 1913 was 24·1 per 1,000 population. In 1931 this rate had dropped to 15·3, a decline of 36·5 per cent. in eighteen years. The continued growth in enrolment on the secondary school level is partly due to the fact that the declining birth-rate has not operated sufficiently long to have full effect on high school enrolment, but partly also to the fact that an increasing proportion of children aged 14 to 18 are attending school. At the onset of the depression, approximately 50 per cent. of the children of these ages were in school. Such data as are available indicate that the depression has resulted in an increase of this percentage.

Increased Responsibilities, Decreased Resources

While the total enrolment has continued to mount during the depression, the number of teachers employed has shown an opposite tendency. The number of teachers has decreased at least 10,000 during the last two years, and enrolment has increased a half-million.

Total public school expenditure did not begin to decline until 1931. In 1932 and 1933 the rate of decrease gathered momentum, until at present the total annual expenditure for public education in elementary and secondary schools is more than $350,000,000 less than in 1930. Expenditure on school buildings and sites has decreased much more rapidly than for other purposes. The cost per child enrolled showed slight annual increases from 1926 through 1930. In 1931 a downward trend began, which by 1933 has reached approximately $74 per child enrolled as compared with $90 in 1930 and $82 in 1926. Much of this per pupil decrease is the reflection of the relatively rapid drop in expenditure on buildings and sites.

The data in Table 1 for the country as a whole obscures the tremendous variations which exist between states, counties and local districts. Individual rural counties, according to the United States Office of Education,[1] in 1931–2 showed reductions in expenditure as high as 58 per cent. in Mississippi, 54 per cent. in Arkansas, 51 per cent. in North Dakota and Michigan, 48 per cent. in North Carolina and 41 per cent. in Oregon.

Reduced Expenditure on Salaries

Salary costs, which represent approximately 80 per cent. of current school expenditure, have been diminished by increasing the

[1] See *School Life*, vol. xviii, No. 8, April 1933, pages 141–2.

size of classes and thus decreasing the number of teachers employed, and by reducing the salaries paid to those remaining.

Table 2 shows the percentage changes, recorded by the United States Office of Education, in budgets for teachers' salaries in 1,075 cities during the last year. These decreases reflect the drop in number of teachers employed and cuts in salaries.

In Table 2, the states have been arranged in five geographical groups in order to bring out the fact that the schools in some sections of the United States seemingly have been harder hit by the depression than in other sections. Even this does not give an entirely accurate picture, for in several states in the North Atlantic section, where laws prevent the reduction of teachers' salaries, the teachers have voluntarily refunded part of their salary. Such reductions do not show in Table 2.

Table 3 gives another picture of what has happened to teachers' salaries. It shows the changes in the median salaries paid to elementary and high school teachers during the last biennium, in city school systems, arranged in five population groups.

All types of school employees have suffered reductions in salaries. This is true both in the smaller cities and in the larger cities. Generally speaking, the largest percentage cuts have been made in the higher salaries.

In some local school districts, everything beyond a bare classroom, a teacher and a crowded class has been under fire. In such districts supervisors and certain administrative officers have been transferred to teaching positions. In other districts, when supervisory or administrative offices become vacant through resignation, death or retirement, the positions are left vacant.

Table 4 presents a general picture of the typical salaries paid to teachers in city school systems in the United States during the current school year.

Effects of Depression in Rural and Urban Areas

While the general economic depression is afflicting all areas of life, it is in the less wealthy states and localities that the result is most serious. The rural areas which, even during the prosperous 1920's, provided relatively meagre educational facilities—a narrow curriculum, many untrained inexperienced teachers, few libraries and relatively short school terms—are now making the greatest reductions in educational opportunities.

One can predict with reasonable accuracy what is happening to the schools of a state or of a locality, providing one has figures indicating whether that state or locality is above or below the average in taxable wealth.

Closed Schools and Shortened Terms

Closing schools and shortening school terms are socially the most serious types of retrenchment. Most of the city school systems

TABLE 2

PERCENTAGE CHANGES IN BUDGETS FOR TEACHERS' SALARIES IN 1,075 CITIES FROM 1931–2 TO 1932–3: EXTREME DECREASE AND MEDIAN [1]

DIVISIONS	NUMBER OF CITIES REPORTING	DECREASES	
		EXTREME	MEDIAN
United States [2]	1,075	43·0	7·5
North Atlantic Division	340	35·3	1·3
North Central Division	406	38·9	9·8
South Atlantic Division	69	30·7	7·9
South Central Division	127	37·7	12·9
Western Division	133	43·0	10·0
North Atlantic Division:			
Maine	9	35·3	3·5
New Hampshire	5	10·8	6·7
Vermont	6	12·1	3·4
Massachusetts	44	13·5	·4
Rhode Island	8	12·8	7·1
Connecticut	9	13·9	6·5
New York	82	18·9	·3
New Jersey	56	14·2	1·8
Pennsylvania	121	21 0	1·8
North Central Division:			
Ohio	65	30·8	7·2
Indiana	44	20·3	9·0
Illinois	69	37·4	11·9
Michigan	49	38·4	12·7
Wisconsin	42	27·5	5·5
Minnesota	29	15·9	6·9
Iowa	26	22 6	10·1
Missouri	24	24·0	10·4
North Dakota	4	13·8	12·0
South Dakota	11	17·0	9·9
Nebraska	11	17·7	8·9
Kansas	32	38·9	11·0
South Atlantic Division:			
Maryland	3	5·6	3·5
District of Columbia	1	6·3	6·3
Virginia	15	27·1	7·5
West Virginia	15	26·8	12·9
North Carolina	14	19·4	2·4
South Carolina	5	16·7	13·4
Georgia	11	17·2	7·9
Florida	5	30·7	10·9
South Central Division:			
Kentucky	11	26·4	12·4
Tennessee	10	22·6	12·2
Alabama	14	25·0	11·2
Mississippi	6	27·2	7·4
Louisiana	5	29·8	17·4
Texas	44	37·7	10·7
Arkansas	13	31·3	19·4
Oklahoma	24	33·0	16·7

1 *Taken from "School Life," vol. xviii, No. 9, Official Organ of the Office of Education, United States Department of Interior, Washington, D.C., May* 1933.

2 *Read Table 2 as follows: Out of* 1,075 *cities in the United States, the percentage decrease in the budget for teachers' salaries in one city was* 43·0. *This was the largest percentage decrease in any city. The median percentage decrease for the* 1,075 *cities was* 7·5. *Of the* 340 *cities reporting in the North Atlantic Division, the percentage decrease in the budget for teachers' salaries in one city was* 35·3. *This was the largest decrease reported in this division. The median percentage decrease for these* 340 *cities was* 1·3.

TABLE 2—*continued*

Western Division:			
Montana	9	19·4	10·4
Wyoming	6	16·0	11·5
Colorado	16	26·7	9·7
New Mexico	6	26·9	20·4
Arizona	6	38·4	17·4
Utah	6	24·8	9·4
Idaho	10	12 0	8·4
Washington	24	43·0	10·4
Oregon	11	33·0	16·9
California	33	19·3	5·4

TABLE 3

SALARIES PAID TO CITY TEACHERS IN 1930–1 AND 1932–3 [1]

POPULATION GROUP	POPULATION RANGE	MEDIAN SALARY PAID TO ELEMENTARY-SCHOOL TEACHERS [2]				MEDIAN SALARY PAID TO HIGH-SCHOOL TEACHERS			
		1931	1933	DECREASE	PER CENT. OF DECREASE	1931	1933	DECREASE	PER CENT. OF DECREASE
		$	$	$		$	$	$	
I	Over 100,000	2,118	1,947	171	8·07	2,731	2,479	252	9·23
II	30,000 to 100,000	1,609	1,526	83	5·16	2,111	1,994	117	5·54
III	10,000 to 30,000	1,428	1,360	68	4·76	1,876	1,747	129	6·88
IV	5,000 to 10,000	1,303	1,217	86	6·60	1,692	1,575	117	6 92
V	2,500 to 5,000	1,162	1,089	73	6·28	1,547	1,429	118	7·63

1 *See "Salaries in City School Systems, 1932–3," "Research Bulletin," vol. xi, No 2. Washington, D.C.: National Education Association, March* 1933.
2 *Includes kindergarten teachers in Groups III, IV and V.*

TABLE 4

MEDIAN SALARIES PAID TO TEACHERS AND PRINCIPALS IN 1932–3 [1]

POPULATION GROUP [2]	KINDERGARTEN TEACHERS	TEACHERS OF ATYPICAL CLASSES	ELEMENTARY SCHOOLS			JUNIOR HIGH SCHOOLS		HIGH SCHOOLS		PART-TIME OR CONTINUATION SCHOOLS	
			TEACHERS [3]	PRINCIPALS		TEACHERS	PRINCIPALS	TEACHERS	PRINCIPALS	TEACHERS	PRINCIPALS
				SUPERVISING	TEACHING						
	$	$	$	$	$	$	$	$	$	$	$
I	1,909	2,100	1,947	3,102	2,184	2,204	3,961	2,479	4,468	2,793	3,700
II	1,557	1,747	1,526	2,569	1,872	1,761	3,037	1,994	3,885	2,017	2,900
III	—	—	1,360	2,252	1,648	1,525	2,493	1,747	3,300	1,741	2,400
IV	—	—	1,217	2,314	1,465	1,376	1,956	1,576	2,603	1,500	—
V	—	—	1,089	2,000	1,353	1,270	1,536	1,429	2,134	950	—

1 *Taken from the "Research Bulletin" of the National Education Association, vol. xi, No. 2, March* 1933, *page* 48.
2 *For population ranges see Table* 3.
3 *Includes kindergarten teachers in Groups III, IV and V.*

report that they will be able to operate for a reasonable term during the school year 1932–3. Many of the rural schools in the poorer districts are not so fortunate. Thus far, 2,571 schools housing some 300,000 children have closed their doors. These schools are generally in the poorer states and localities.

It is impossible to estimate with accuracy how many schools are open but are not paying their bills. Even some of the largest cities are in this class. Chicago owed its 15,000 teachers nearly $30,000,000 in unpaid salaries in May 1933. Probably it would be a substantial under-estimate to say that, if all schools were to be closed which are not paying their current expenses, the number would be well up in the thousands, and considerably more than a million children, or approximately one in twenty-six, would be involved. These school systems have ceased to purchase textbooks and supplies, are making no repairs, and are paying their teachers in script or not at all. The 2,571 closed schools passed through this stage some six months ago.

The School Curriculum and the Depression

Some school boards, in making economies, appear to have a priority rule in deciding what subjects shall be dropped. They go by the analogy of the business world, in which the oldest employee is usually the last to be dismissed.

Among the most frequent reductions in educational opportunities which have been reported are these: kindergartens have been curtailed or entirely eliminated in 170 cities; schools for handicapped children in an equal number; night school in 120 cities; art instruction in 100 cities; music instruction in 160 cities; school nurses in 135 cities; home economics or manual arts in 145 cities; and physical education in 160 cities.

While some school systems are dropping such newer subjects as art, music, home economics and physical education, the majority are continuing these activities.

Some writers are urging that the depression calls for an expansion rather than a restriction in the scope of the curriculum. They claim that the main problem of education is our civilisation itself and how it is to survive. They insist that every graduate of the grammar school should understand at least the fundamental principles of economics, should know the underlying facts about trade, money and credit, why we have depressions and how to get out of them, why wars take place and what can be done to prevent them. They would test the traditional offerings of the school by this criterion: "Is this subject vitally necessary, not as a mental discipline, but as part of the equipment which every citizen needs in the fourth decade of the twentieth century and thereafter?"

Long before the depression began, hundreds of local school districts were revising their courses of study. One authority in the field writes: "America has witnessed in the last decade more

activity in curriculum and course of study construction than in all its previous history." Even in the face of the present depression, some extensive programmes of constructive curriculum building are under way.

The depression period is one in which many fundamental questions are being raised concerning American education. What should be the purposes, scope and procedure of the public school system of a democracy such as the United States? Should public schools continue to offer free schooling from the kindergarten through the university, or should such opportunity, at least on the upper levels, be provided only for those belonging to an aristocracy of wealth or of intellect? Should the traditional curriculum of the three R's be the only instruction provided for the masses, or should it be the aim to offer all children subjects designed to result in broader appreciations and understandings? Has the school been too much concerned with producing individuals prepared to fit into society as it is, and too little with producing those prepared and anxious to shape a better social order? These and other fundamental issues are being seriously faced by a larger number of laymen and teachers than ever before in American history. These questionings are an outgrowth of a belief on the part of many that the current depression marks a turning-point in American history, and as such calls for a reappraisal of the social institution—public education.

In facing these issues thoughtful persons tend to divide into two camps. One group claims that our current ills are an outgrowth of the mistake of departing too much from the traditional curriculum of the nineteenth century, and that the economic, social and political ills of to-day will be remedied only by returning to many of the educational principles and procedures characteristic of that century. Others claim that the school has lagged behind society and that social salvation waits upon a genuine and general adoption of the "progressive" educational principles, which have resulted from the frontier thinking of such men as John Dewey, and which have as yet been but little applied to the typical school system. Which group is right? No one can say, to-day. Perhaps both to some extent. But one thing can be said with assurance. Many are seeking the right answer. Whether the intellectual ferment, which is now influencing other fields as well as education, is merely a phase of the depression, which will pass with the coming of better times, or whether it is destined to continue and fundamentally revise the course of American educational history, no one can state with assurance to-day. There are signs which point in both directions.

Higher Education and the Depression

Data are not available from which to draw a complete picture of the financial status of the hundreds of institutions of higher education in the United States. Many privately endowed colleges

are suffering greatly reduced support due to the shrinkage in value and income of their endowment funds. Many private institutions have also suffered a sharp decline in tuition fees, since large numbers of their students, unable to pay these fees, have withdrawn and enrolled in public institutions.

Data early in the year from twenty-one typical colleges and universities show that their prospective resources from state taxes were 11 per cent. less than their previous year's expenditures. Later data from eighteen state universities and colleges show an average decrease of 21·7 per cent. in amount of state funds provided in the current year. The percentage decreases ranged from 4·5 to 46·7.

Despite reduced funds, higher institutions of learning, particularly state universities, are having to care for increased numbers of students. Table 5 shows that the percentage of increase for 490 institutions for 1930–2 was 3·3. This is less, however, than the increase for preceding years. For the period 1928–30, the percentage of increase was 6·4 and for 1926–8 it was 13·2.

The College Graduate—his Opportunity for Employment in 1933

Employees, and executives too, have had to face the hard fact that when earnings fall off the employees are among the first to suffer. Their salaries are reduced—and in many cases their positions are abolished. Each year, since the onslaught of the depression, the number of unemployed has increased.

This year more than a hundred thousand young men and women are graduating from the colleges and universities of the United States. They will enter a labour market already glutted with some ten or fifteen million unemployed. The immediate future of these trained and able young college graduates is as uncertain as the outcome of the world-wide depression. Complete data are not available as to how successful the college graduates of the past three years have been in securing positions. Recent reports [1] from individual institutions show that the number of placements made by the Bureau of Appointments of Yale University in 1932 were two-thirds of those for 1931. About 75 per cent. of the University of Chicago graduates register for jobs under the campus employment bureau. Of this number, " about 75 per cent. were placed in 1930, 60 to 70 per cent. in 1931 and less than 50 per cent. in 1932."

Increasing numbers of college graduates are continuing in graduate or professional study. The following report from Princeton University shows the trend in this institution : " Up to and including 1930, approximately 35 per cent. of each class entered graduate study or study for the professions. This percentage rose to about 48 in 1931 and to nearly 55 in 1932."

Many college graduates who have found employment have had

[1] See *Survey Graphic*, vol. xxii, No. 6, June 1933, pages 320–3.

to take whatever was available—often jobs in all sorts of ill-paid dead-end occupations.

The unemployment of college graduates has become so extensive a problem that thoughtful citizens are asking, " Can we afford to let large numbers of the oncoming generation wear out and rust out in an effort to adjust to an intolerable situation ? " National leadership is needed in giving these able young people the thing they most want and need—worth-while work to do.

Maintenance of Essential Services on Reduced Budgets

Many individual school systems, under statesmanlike leadership, have accomplished such retrenchments as are necessary without

TABLE 5

COMPARATIVE ENROLMENTS OF STUDENTS ABOVE SECONDARY GRADE, 1930–2, UNIVERSITIES, COLLEGES AND PROFESSIONAL SCHOOLS [1]

GRADE OR TYPE OF CONTROL	NUMBER OF INSTITUTIONS REPORTING	ENROLMENT		INCREASE [2]	
		1932	1930	NUMBER	PER CENT.
Degree-granting :					
Public . .	79	256,820	243,761	13,059	5·4
Private . .	300	206,095	209,478	— 3,383	— 1·6
Total .	379	462,915	453,239	9,676	2·1
Junior :					
Public . .	53	25,394	19,056	6,338	33·3
Private . .	58	9,188	9,120	68	·7
Total .	111	34,582	28,176	6,406	22·7
All schools :					
Public . .	132	282,214	262,817	19,397	7·4
Private . .	358	215,283	218,598	— 3,315	— 1·5
Total .	490	497,497	481,415	16,082	3·3

[1] *Taken from " School Life," vol. xviii, No. 9, May* 1933. *These data are based on returns from* 490 *institutions which represent about one-half of the total in existence.*

[2] *Decrease indicated by minus sign.*

undermining the essential services. This has been done by such means as these : organising the school staff on a more efficient basis ; retrenchment in clerical services and office equipment ; installation of sound budgetary procedures ; limited reduction in supervisory staff ; prudence in the selection, purchase, care and use of supplies and equipment ; adoption of measures which lower the cost of fire insurance of school buildings ; better management and protection of school funds, thereby obtaining the optimum amount of interest on deposited funds, and the protection of school funds against loss ; carefully considered increases in class size at certain levels and in certain subjects only, rather than the establishment of a standard class size for the entire school system ; and the readjustment of schedules and classes so that the average teaching load remains approximately constant, while inequalities in load are reduced or removed.

Regardless of the amount of money available for schools, there are efficient ways and inefficient ways of spending it. There is a vast difference both in theory and in practice between arbitrary slashing of school budgets and a sound policy of securing the utmost value from the expenditure of school funds. The former is easy but destructive ; the latter, difficult but constructive.

Constructive Educational Outcomes of the Depression

While many of the school systems of the United States are being seriously handicapped by lack of adequate funds, certain constructive outcomes are resulting from the economic depression. The following deserve special mention :

General Reappraisal of the Purposes of the School and of the Instruction Leading to these Purposes

In every state, educators and laymen are raising questions such as these : What should be the rôle of the school in effecting social changes ? Dare the school build a new social order ? In how far can the school build a new social order ? What new emphasis should be given to present courses of study ? What new topics should be added ?

Elimination of Dead Wood in Administrative, Supervisory and Teaching Staffs

Even in school systems where the personnel is carefully chosen, some employees are far superior to others. In this period of retrenchment, when staffs are being reduced, selective bases, rather than priority of service, are being used in at least the better administered school systems.

Reorganisation of Teacher-training Facilities

At the present time there is a large over-supply of teachers, due to the decrease in the number employed and to the training of too

many. This is resulting in a general reappraisal of the facilities which should be maintained for the training of teachers. Many small and ineffective teacher-training institutions are being eliminated. The surviving institutions are carefully examining their professional courses, employed in the training of teachers.

Consolidation of some of the Small School Districts

The hundreds of independent local school districts existing within many states vary tremendously in wealth. By regrouping these into larger administrative units, an adequate system of schools can be maintained at a more equitable tax rate and adequate administrative and supervisory leadership can be provided.

The Modernisation of Tax Systems within Certain States

Between 80 and 90 per cent. of the school tax revenue in the United States is raised through the general property tax. In an industrial age this is an anachronism. Yet, the general property tax, levied locally and collected locally, is still almost the sole basis of school support in many states. Practically all states, under the stress of the depression, are being forced to revise their systems for raising school revenue. Income, business, corporation, severance, and other forms of taxes are spreading the burden of school costs, and more equitably placing the incidence of taxation. The continuance of this movement will, with the return of prosperity, represent a significant advance in the financing of education.

Development of more Adequate State School Equalisation Funds

Some states are accepting the responsibility of maintaining a minimum school programme in all communities. This is being done through the establishment of state equalisation funds, which make it possible for all localities to maintain a reasonable level of education without levying more than a reasonable tax. New York State, for example, annually appropriates approximately $100,000,000 in order to guarantee that every school district in the state will be able to maintain at least a minimum educational opportunity for its children.

Innovations in Adult Education

Perhaps the most outstanding of a number of similar experiments in adult education is the one going on in Des Moines, Iowa, under the auspices of the city board of education, and financed by the Carnegie Corporation. Under this plan, forums are conducted to discuss controversial social issues. All reasonable latitude for discussion is permitted. Competent leaders for these forums are employed. All meetings are open to the public without charge.

The Unification of Teaching Forces of the United States

In January 1933, the officers of the National Education Association and of the Department of Superintendence appointed a Joint Commission on the Emergency in Education, which acts as a board of strategy. It serves as a rallying-point for the forces made up of teachers, parents and public-spirited citizens interested in the maintenance and improvement of the free public schools of the United States. Its programme of action includes :

1. Collection and analysis of data as to just what is happening in the school systems of the country.
2. The holding of regional conferences.
3. Nation-wide radio broadcasts.
4. Organisation of a Centre of Investigation which is developing fundamental principles and policies to govern the reorganisation of the state systems for financing the schools.
5. The collection of data relative to constructive economics in education.

Conclusion

While the schools of the United States are facing serious financial difficulties in many districts, and some children are being denied adequate educational opportunities, there is every reason to hope that the nation as a whole will emerge from the present financial crisis with the fundamental structure of its public school system intact and some phases of it improved.

JOHN K. NORTON.

PART II *SECTION II*

Survey of Secondary Education

CHAPTER ONE

ENGLAND AND WALES: THE FUNCTION OF THE SECONDARY SCHOOL

THE growth of secondary education during the last thirty years will probably stand out as one of the most remarkable features, even in an epoch of swift and bewildering developments. Drawing largely on the past for its original model and inspiration, it is being gradually modified and readjusted to present conditions and, in view of the comprehensive and vital nature of its functions, there can be little doubt that the ultimate character of its evolution provides one of the most interesting and debatable problems of the future.

The Centenary of English Public Education

More and more the provision of every kind of education becomes a matter of State obligation, and therefore of democratic concern, and in the year which marks the centenary of the first Parliamentary grant to education, it is a fitting task to take stock of the present position, and to attempt a forecast of future possibilities.

It is a far cry from a grant of £20,000 in 1833 to an educational estimate of £8,000,000 for non-university higher education alone in 1933 and, while it may be allowed that in a matter of such human value theory must to some extent run ahead of practice, and that soundness of policy and actual achievement can be attained only at the cost of a certain amount of tentative experiment and idealistic redundancy, the productive value of such a large national expenditure has rightly to be considered in the relentless light of its reaction upon national needs. In other words, the plain question must be borne in mind whether the considerable resources which have been put at the disposal of secondary education, and which alone have made possible its phenomenal growth, tend to be used to the best advantage. Few things are more evident than the determination of parents in these days, in spite of—indeed perhaps because of—economic difficulties, to regard the most thorough possible education of their children as a sound investment for the future; and it will scarcely be disputed that a nation to-day must regard well-directed expenditure, both of money and effort, in the organisation of education, and the right formulation of educational policy for the generation of to-morrow,

as among the first of its obligations. It is a charge of which the sanctity should be accentuated by consciousness of a good deal of neglect in the past, by the new-born aspect of the growing boy and girl as a national factor, and by the immeasurable promise of the human material with which it deals. Nothing should make a stronger or more enthusiastic appeal to national pride and national goodwill. But strength and enthusiasm alone can be an undisciplined and ill-considered motive; in this matter of secondary education, with all its human associations and its power of filial appeal, there must be some defined sense of objective and a deliberate calculation of returns.

Varieties of Schools and Pupils

Any attempt to formulate an exact assessment of the function of the secondary school in the national life is complicated by the diverse variety which characterises the schools themselves, not only in their historical development and local environment, but in the types and requirements of their pupils. Secondary education in its most comprehensive form comprises a very wide range of schools extending from the great independent "public" schools on the one hand to the newly established "central" and "senior" schools on the other. They may differ vastly in tradition, in age, in resources, in environment, in organisation and in curriculum. Some trace their history back to the early days of pious founders; others were brought into being but yesterday by the devoted foresight of a local education authority. Some have venerable buildings, steeped in the antiquity of the past; others are built on the latest model of municipal architecture and design. Some can depend upon their own financial resources, whether drawn from long-established endowment or from fees that make them self-sufficient; others are provided entirely from a combination of national and local grants; while others again have their limited resources aided by the assistance of county and borough authorities. Some are placed in the heart of the country; others in the centre of great cities. Some adhere to a classical tradition, with some added modifications consequent upon the growing demands of recent scientific development; others are frankly modern in their relation to technical and practical training.

Nor are these the only symptoms of variety, for each school has to some extent within itself a diversity of material and experience that constitutes an individual problem involved in the greater whole. The general framework of organisation is based upon the first, or School Certificate, examination at the age of 16, the time up to which, under the official regulations, all pupils should stay, followed by the second, or Higher School Certificate, examination at the age of 18, leading in some cases to the university. But some pupils who remain at school after 16 do not take the Higher School Certificate examination, while some who stay

till 16 do not pass, or even enter, for the School Certificate examination; and, again, many who take the Higher School Certificate examination do not pass on to the university. To the particular questions raised by these complications more consideration must be given later; for the present it is sufficient to point out the variety of circumstance and condition that characterises not only school and school, but each school within itself.

Unity of Essential Spirit

Such a diversity has about it something at once splendid and difficult. It is in a sense a tribute to the individualistic liberty which characterises so much in our national life. Were it diversity only, that would not be true, but with all their manifold differences and divergences the secondary schools of the country have in common certain aspects and ideals of school life which make it possible for them to claim a definite relationship, both spiritual and academic, and to feel themselves definite and accepted units in a great system, which links the past and present with the future in the hearts and minds of those citizens of the next generation who are specially chosen for their promise and potentiality. It is difficult to define this common heritage of school experience, and it is easy to fall into a facile exaggeration of its existence. It cannot be denied that it has been assimilated, and in some cases merely imitated, from the example and tradition of older schools, nor that in certain instances the achievement of it does not go much beyond lip service and self-conceit; but in the main it is true that loyalty to membership of the school, a full share in its communal life, both in the classroom and outside it, and a first taste of that deeper fellowship with men and ideas and ideals which leads on to the whole life of culture and understanding, are among the strongest and most universal threads that are woven into the texture of English secondary school life.

A secondary school, no matter what its standing, would be of little worth if it did not contribute something along these lines to its pupils, as a preparation for life and as a background to all their future livelihood. The effectiveness with which such a function is discharged cannot be measured by statistics nor by examination results nor by financial estimates. It is a function which can be discharged with special effect during the impressionable years and in the companionable atmosphere of school life. It can give zest to work and intellectual development, as well as to games and physical growth. It is the most priceless and binding factor in all English secondary school life to-day.

Problem of Adaptation to Changing Conditions

But in itself it is not enough; it has to permeate and be regulated by actual effort and order in definite aims and objects, and there must be the material upon which it can work. This consideration raises immediately the more practical and concrete problem of

the function of the secondary school. Is it dealing with the right kind of material? Does it maintain a living relationship with the experience for which it professes to prepare? Does it attempt too much in its individual provision for a variety of possibilities? Is there need for more co-ordinated realism in the system as a whole?

These are large questions, but at such a transitional period in national, and indeed in world, history they call for investigation. It is at least a sign of the general importance and interest of the matter that they arouse such widespread concern and discussion and that the schools themselves are the objects of so much healthy and enlivening criticism. No one will doubt the immense advantage that has been gained by the removal, for the most part, of educational development from the arena of party politics, but there are few subjects upon which more divergent views are expressed in public discussion, or about which the individual citizen feels he has a greater right to dogmatise. For not only in many cases does it touch him nearly, but the complexity and variety of its contacts and implications, and the indeterminate uncertainty in which so much of its eventual evolution is enveloped, combine to make it a fruitful topic for controversy.

There is probably not a town or rural district in England and Wales without a secondary school available, to which those pupils can go who vindicate their right to do so. In some cases boys are sent to boarding schools often of great standing and prestige, but with no definite local association, or again in other cases there is no very distinctive line drawn between the local secondary school and the central school which, though it may not keep its pupils till 16, yet follows much the same course in curriculum and in general objective as the secondary school. Generally speaking, as has been indicated, they pursue a double aim: to develop intellectual ability and to inculcate a social and cultural standard of living. In other words, the aim is to fit a boy for a job, and to teach him to live in such a way that his job and his life as a whole may be set in the right perspective.

This is no new aim, but with the spread of secondary education there has come inevitably a wider interpretation of it. In earlier days the nature of the job undertaken by the boy from the privileged school was determined mainly by a choice of one of the learned professions, or of the Services, or of some task of imperial development. Now the exigencies of international trade, of commerce and industry, and the general shifting of economic centres of gravity, have multiplied the avenues of approach to employment; and, though during the present period of stress openings are difficult to find, there can be little doubt that, with the general revival of trade and under less stringent conditions, there will be a demand for pupils from secondary schools in a much larger variety of occupations and careers than would have been dreamt of a score of years ago. It has been suggested above that the

secondary school has a unique opportunity for providing a reasonable and well-balanced attitude to life itself. It might indeed be argued with a good deal of conviction that no other educational institution can make this provision with quite the same traditional effectiveness. A good deal of tradition, however, still colours also the method and organisation of the secondary school curriculum, and it may be too easily assumed that the academic organisation of pre-war days is adjustable to the more varied and more realistic requirements of to-day.

A detailed discussion of the balance of subjects in the school programme cannot be undertaken in this chapter, but there are obvious signs of a growing cleavage of opinion between those who feel that only modernising adjustments of the traditional curriculum are required to meet the newer needs, such as may be typified by the improvement in the teaching of geography and the introduction of biology, and those who are convinced that nothing less than a thorough-going overhaul of the whole system will make it an instrument of any real use for the true purposes of national development.

The View of the Conservative Modernist

It is argued by the more conservative that they are by no means blind to the needs of progress and that the scope offered by secondary schools, both in older and in newer subjects, has been widened immensely and continues to submit itself to experiment and suggestion ; but that its main object must never be vocational training pure and simple. Flexibility of mind, adaptability of skill both intellectual and manual—these must be retained at all costs as the true aim of education, and these can go hand in hand with the general training for a fuller and richer life, without which a school cannot hope to save its soul alive. The value of learning English itself, of studying foreign languages living or dead, of a sound training in mathematics and science, is not denied ; but these things are to be regarded rather as vehicles of intellectual progress, as a means of shaping and adapting the minds and abilities of those who learn, so that they may be agents of versatility and discrimination in whatever work may lie ahead. Such a point of view at least constitutes a living faith ; it is based upon a fundamental and enduring conception ; it has its roots deeply buried in the best teaching of the great philosophers. But it has its temptations ; it is easily liable to the insidious growth of self-complacency ; it may with course of time come to interpret falsely a perfunctory routine as the high purpose and inspiration of human enterprise. For this very reason it is open to criticism and becomes an obvious target for impatient discontent.

The Critic of the Curriculum

Hence come the strictures of those who demand something immediately revolutionary rather than evolutionary in the organisa-

tion and policy of the secondary school, in order that it may fulfil a more definitely utilitarian function. Nor can the urgency of such a demand be lightly dismissed, for in its full implications it would involve, not merely changes in the curriculum and more practical treatment of this or that subject, but a drastic alteration of the existing framework of the secondary school system. Insistent voices have often been raised in protest against too academic a conception of the subjects that form the main stock-in-trade of the secondary school curriculum. They have claimed, and not without some reason, that English should be taught as a native tongue to be used for practical purposes, not merely as an instrument of literary appreciation ; that a knowledge of foreign languages should be approached as affording a valuable factor in commerce and international relationship ; that instruction in mathematics and science should be more closely related to the actual facts of life and to their natural application in industry and everyday utility. Such a claim in itself is scarcely revolutionary, and it might be argued without fear of contradiction that recent developments in secondary schools have done much to introduce a more living reality into the study of most subjects.

The Critic of the School System Itself

But there are other and more profound considerations. The normal secondary school course begins at the age of 11, for the majority it ends at 16, and for the remainder it continues till 18. How far is it possible for an individual school within the limits of its curriculum and its communal life to make the best of its material when there are so many varying objectives and such divergent standards of progress ? Is there not a danger that the pupil is adjusted to the curriculum rather than the organisation to the needs of the pupil ? The standard of admission to secondary schools is supposed to be such as will involve the eventual passing of the School Certificate examination at the age of 16. The whole course of instruction until that age is mainly based upon preparation for that examination, and yet a considerable proportion of pupils never reach the standard of the examination. If this situation is due to the difficulty of correct selection at the age of 11, ought there not to be a revision of the method of selection or a reorganisation of the school system, which would postpone selection till a later age and would confine the functions of the secondary school to dealing with pupils after the age of 13 or 14, when their standard of potential intelligence and development would be more easily assessed and when, as a result, more uniformity of progress and less wastage of material and effort would be achieved ? Much stress may have been laid upon the break in growth at 11 plus, but has there not been too facile an acceptance of such a definition, and do not the " public " schools, as such, delay their admission of pupils until the age of 13–14 ?

These are searching questions, but they are balanced by problems of no less difficulty at the other end of the school course. The sixth form syllabuses of most schools are based upon the requirements of the Higher School Certificate and university scholarship examinations, and are, to say the least, strongly coloured by the supposition that the main business of the school with pupils of 16–18 is preparation for the university. Yet a comparatively small proportion of 16–18 pupils in secondary schools actually proceed to university courses, or even pass the Higher School Certificate examination. What systematic policy is followed in regard to these senior pupils in their post-School Certificate work if the university is not their destination? Is there not a danger that they may merely clog the machinery of university preparation and, in view of the cost and individual nature of much sixth form work in the schools, is there not much to be said for a greater measure of amalgamation and co-ordination between schools in such work? Might not the university candidates on the one hand, and other post-School Certificate students on the other, be grouped together in a locality, so that more advanced secondary school work should be considered as a local factor to be organised on the basis of subject and standard and objective, rather than of the school as an individual unit? Here again is the claim in another form for more uniformity of progress and type of work, and less wastage in material and method.

It would be an easy matter to enter more fully into the details of possible readjustments upon the lines indicated by these questions, to relate them to individual local conditions in various parts of the country, and to draw attention to the practice followed in this or that direction by foreign countries. It would be easier still to give a prejudiced verdict upon the large problems at issue, but the aim of this survey is rather to indicate things as they are and as they may be, rather than to pursue definite lines of decision. There are, of course, more factors of practical educational policy involved in the questions that have been raised, and some of these have already been included in the material of official reports and circulars, while others have advanced no farther as yet than the expression of responsible individual opinion. It is all too easy to justify as such educational reforms which in actual fact have an ill-considered economic motive, but, even allowing for that, it is clear enough that such proposals as the closing of smaller schools, the revision of staffing, the coalescing of individual schools' advanced work in convenient areas, have to be examined very thoroughly, without bias and without preconceived hostility, in the interests of secondary education as a whole, as a factor of national value, before they can be assessed at their true worth.

The Critic's Utopia

Much more far-reaching is the suggestion that a change in the actual form of the Secondary School is needed to enable it to discharge a decisive function. If pupils were entered from a variety of

central and senior schools, or from newly-established junior secondary schools at the age of 13–14, when the process of selection would admittedly be easier and more effective, all would normally pass the School Certificate examination, and then university candidates and others doing advanced work for different reasons would be " creamed " and grouped respectively from schools in local areas, and a higher and more uniform standard of progress and attainment would be made possible, while much wastage in the matter of organisation and staffing would be eliminated. There would be comprehensive efficiency in the work done, and in the purpose contemplated. It would be possible to establish a much closer connection between the advanced work of the schools and the university courses, and of this there is need enough. Finally, in the case of non-university pupils, there could be more adequate and definite preparation for eventual employment in commerce, industry, salesmanship and so on, with its ultimate advantage in the matter of foreign competition and international relationships.

This is an alluring prospect as a Utopia of educational efficiency ; it has a logical urgency about it ; it offers full value and eliminates much of the trial-and-error wastage that seems to impede the present system. It presents the schools as definite units engaged in the discharge of one clearly-marked function. It appears to offer solutions to some of the most pressing problems of examinations, of the relationship between school and university, and of employment. Secondary schools would neither have within them many pupils who, judged by official standards, prove eventually to be unworthy of their places, nor foist upon the country year by year hundreds of boys and girls who become " mis-fits," untrained for any particular career and developed for the most part on academic lines with a bias towards professional and clerical work, when already most avenues in that direction are uncomfortably congested.

The Strength of the Secondary School as it is

The visualisation of so radical a transformation of the existing secondary school system can scarcely be expected to commend itself to those most closely concerned with the actual work of the schools. They would, no doubt, feel that the birthright of individuality was being bartered for a mess of over-organised pottage, and that the danger of specialisation in a massed formation would appear in an even more startling shape than that in which it confronts education as it is. The breaks in continuity at 11, at 13 and again at the post-School Certificate stage would be held to militate against any development of uninterrupted corporate loyalty and feeling ; the tendency to segregation of standard and type would be held to limit the opportunity of individual development and that general sense of human contact and experience which is so definitely characteristic of the normal secondary school. Personality in all its variety of aspects could not have the same play : out-of-school

activities and interests would be more stereotyped and less spontaneous. The gradual evolution of responsibility would be stifled in the close-packed organisation of efficiency and homeopathic competition.

It would probably be more profitable to pass to a more intimate investigation of the conditions in secondary schools as they are, and to explore the extent to which reforms of one kind or another have already been set on foot, under pressure of public criticism from without and conscientious enthusiasm from within. Enough has already been said to indicate that the main points of weakness are to be found in the actual framework of organisation and the chief elements of strength in the less tangible factors of spiritual values and the first stirrings of human experience. It is easy to exaggerate both, and to suggest that too much of the one can be sacrificed in the interests of the other. In any case, it must not be forgotten that the existing state of things, if in many schools of rapid growth, has not been suddenly brought into being. It is the result of the impact of many forces, external and internal. It is compounded of many elements, some of them deep-rooted in the heritage of national history. It is not for nothing that the schools of to-day can look back over several years now of wise and far-sighted guidance from the Board of Education, especially through the work of inspectors who, by their correlation of initiative and enterprise in this or that school, have been veritable missionaries of beneficent suggestion and advice. The gratitude of the schools is also due to governing bodies and local education committees, many, if not by any means all, of whom have shown the way in generous and sympathetic interpretation of their powers and responsibilities, as well as to Examining Boards and teachers' associations which have found time, in addition to the necessary work of routine and self-concern, to consider problems of wider aspect and importance.

The Boy and his School

The boy who enters a secondary school at 11 plus quickly finds himself a member of an institution which has life and purpose about it, and which reaches out to an unconceived horizon of dignity and responsibility in the matter of work, of games, of personal and physical development, of ceremonial, of relationship with masters. English and arithmetic have been the staple diet of his intellectual nourishment. Now he starts on one or more additional languages, and widens his mathematical experience into the realms of algebra and geometry. A year or so later he adds other subjects or follows them along lines more definitely leading to the School Certificate examination, regulated, as far as possible, in his choice by the possibilities of his own future or by such distinct bent of mind as he has already shown. More of his work is gradually associated with his own effort through the agency of home-work and in other ways. So he finds himself drawn into a more organised system of games and school societies, some of them often connected with the local

interests of his own town or countryside. His physical development is given fuller play in the gymnasium and the swimming bath. He is introduced to the uses of a library, a school orchestra, the production of a school play on a larger scale than he has perhaps imagined possible. In many cases he shares school dinner with his contemporaries, and under a supervision of decency and good manners. He finds that his doings are often a matter of general interest, not merely to himself, but to those who teach him, in co-operation with his own powers, to think of larger responsibility in his own House and in the School as a whole.

So he grows in stature and understanding; he develops a sense of loyalty and attachment to the School, to his fellows, to his masters: the School is very largely his world, but it is not unconnected with greater spheres and the march of events. A growing intensity of effort and crisis settles upon the School Certificate year, but it is shared with others and mellowed by the collaboration of those who teach him and share his hopes and fears. This may be the end of his school career at 16, and a job must be found. In this his School will help, and so he emerges, not by any means always a mis-fit, or a black-coated worker, but with a clear determination that some things in life are of enduring value, that there are certain standards to be observed, in citizenship as a public obligation, and in private life as a matter of pride and moral well-being. He may not in all cases hold to these standards or make a success of his own future, but when he does, how far could it have been achieved in such a way without the experience of those years at the secondary school from 11–16?

Again, he may go on after his School Certificate examination and embark upon advanced work for the Higher Certificate examination, or for a university scholarship. For this purpose he will devote most of his time to two or three special subjects, but he will not entirely neglect others, nor will he sever his connection entirely with art or music. He will have some experience of private study, of more mature and easier personal association with masters, whether in class or as a leading member of the school in a captaincy or a secretaryship. He will know the first perplexities of the exercise of authority and of responsibility for discipline and order. He will know the security of confidence and trust that comes only to those who have won their way from juvenility to seniority in the same place and with the same people. He will leave in the odour of sanctity, with his powers and interests in the first flush of real development.

It could not be assumed that this is a fair picture of the career of every secondary school boy, but it is typical of more than is generally understood by those who judge schools only from without. In this fact lies one of the chief justifications of the secondary school and, akin to it, one of its main hopes for the future. In the close relation of such an experience to life as a whole, and to the realities of employment and occupation, lies the chief problem.

Defects of Selection at the Age of Eleven

The contention must first be faced that too many secondary school careers fall far short of anything effective or desirable in result, and that many pupils find their way into the schools who, on the frank confession of those best qualified to judge, ought not to have been admitted. This compels a closer investigation of the methods of admission. More and more the entrance examination for scholarship and fee-paying pupils tends to become identical, but its character varies greatly in different areas. For the most part a written examination is taken in English and arithmetic, sometimes reinforced by an intelligence test, and again in many instances accompanied by an oral interview. For such a process of selection careful and shrewd preparation can be and is made in all its component parts. In the larger areas vast numbers of candidates make the matter of discrimination a highly delicate and difficult problem, and it needs little proof to establish the fact that a good deal of chance and arbitrary decision must enter into the final result. It is a truism to every secondary headmaster that the order of merit in the entrance examination is in many cases grotesquely reversed in the course of the first school year, and too often the most promising recruits from the examination fade into ineffectiveness and failure. A written examination pure and simple in English and arithmetic is the only staple factor; intelligence tests are as yet unproven in their validity, and controversy still drags desultorily on about the value, and indeed about the justice, of the oral examination.

Yet few alternative proposals of a constructive nature are forthcoming, and perhaps it is easy to exaggerate and over-emphasise the non-productive results of the system. There are, on the one hand, many boys who gain much from their secondary school experience and who do well in after-life without the *cachet* of the School Certificate, and on the other it is to be remembered that the record of the secondary schools in the university scholarship lists is one of increasing success. It is difficult to see how any system can be fool-proof which is required to select pupils who will not merely pass essential examinations, but who will also gain most from a secondary school course. Criticism and research have already done much to secure improvement, and a good deal may be hoped from the gradual pooling of experience. Possibly more use may be made in future of the elementary school record and the headmaster's analysis of it. It is at least doubtful whether the system is guilty of sufficient failure to justify its radical replacement.

Employment of the School Leaver

What then of the ultimate experience of those who are admitted and run the course either till 16, or farther on till 18, and of the difficulty of absorbing them in employment? This problem is necessarily complicated by the exigencies of trade depression, but at least it may fairly be asked whether any systematic organisation

exists for relating the needs of industry and commerce to the increasing product of the secondary schools. It must be admitted that here there seems to be need for a good deal more effort and investigation. In many parts of the country much effective work has been done in conjunction with the Chambers of Commerce, or with the Ministry of Labour, or by Employment Bureaux in association with the schools themselves and with local interests; but in the main the finding of openings for secondary school boys is still a matter of individual initiative and enterprise. In some schools it has been developed by headmasters and careers masters into something almost amounting to a separate school department. In any case, it is doubtful if any comprehensive national system is either possible or desirable. The prestige and local standing of a school in its own environment can probably do more than anything else to recommend its pupils to opportunities of employment. The problem has had the unremitting attention during the last few years of those most concerned with it, both from the school and from the employers' point of view, and the accumulation of experience thus gained in these critical times will no doubt bear fruit, as it comes to be more closely analysed and more co-operatively used.

Defects of Relationship between Schools and Universities

A considerable number of secondary school pupils pass on to other educational establishments—the universities, technical colleges and teachers' training colleges. An important element in this process is the fact that among these are included the teachers of the future in both secondary and elementary schools. This consideration alone ought to be sufficient to ensure the closest co-operation between university and school, but it cannot for a moment be pretended that a relationship of full understanding or harmony exists. The universities themselves lay down both the lines of qualification for admission through the matriculation examination and for approach to more advanced work in particular faculties through the Higher School Certificate examination; and, in view of the fact that now a very definite proportion of entrants to the older, and most of these to the newer, universities come from secondary schools, the matter of continuity in policy and organisation is one of real urgency. The syllabuses and papers for matriculation and for the Higher School Certificate are set and examined under university auspices, and, as is natural, mainly in the light of university faculty requirements. The majority of pupils who proceed to the universities, particularly to the older ones, do so by means of scholarships awarded either directly by the universities, or through the Higher School Certificate examination, or by the State, or by local authorities. It may therefore be taken as a clear assumption that for the most part the higher work in secondary schools is prescribed by university requirements. The process of transition should be easy and natural, yet it is a common complaint on the part of the

universities that secondary school pupils are found to be the victims of undue specialisation, defective in a proper sense of general education and culture, while the schools too often find that the first year's work at the university is little more than a repetition of ground that has already been covered in the sixth form.

Much useful discussion has been made possible in recent years by closer conference on Examining Boards and elsewhere between representatives of universities and schools, but the fact remains that too much departmental exclusiveness still mars the relationship between them. The somewhat vicarious and impersonal connection that is maintained through scholarship and Higher Certificate examinations is not enough. The full implications of the growth of advanced work in secondary schools in all directions during the past few years, fostered by the Board of Education through the " advanced course " system, are not adequately realised. The programmes of the last year of school and of the first year at the university run too much on parallel lines, which do not meet. It is to be hoped that one of the more immediate tasks of the future will be a closer exploration of this problem. It is certain that a more insistent demand is being made for reconsideration of the present framework of the Higher Certificate examination, in order that it may be more fruitfully and widely related to the proper sphere of special study, and that it may become a more adaptable instrument of liaison between school and university. It would seem to be equally certain that the universities must address themselves to the task of working out a more clearly defined and co-ordinated policy that will be sufficiently common to them all to clear away many existing difficulties without encroaching unduly upon the preserves of their individuality. The wide range of regulations and requirements which characterises the various university medical schools may be cited as a specially exasperating instance of such a lack of cohesion.

Relations with Technical Colleges

The relationship between technical colleges and secondary schools is clearly a matter of more local significance ; and this fact alone should make for an easier process of collaboration and combined interest. In recent years a conception of the value and dignity of technical education has received a distinct impetus, and it is gratifying to note that in many cases joint committees of secondary school and technical college representatives have been set up to consider mutual problems and possibilities. It is obviously of great advantage to pupils in secondary schools that they should be able to pass on to the technical college in an atmosphere of understanding and co-operation ; this is happening increasingly and, what is perhaps still more important, in some instances pupils, while remaining at the secondary school, are being admitted for special work and opportunity to the technical school, and a mutual system of experiment and exchange is thus being established which may bring about results of the utmost importance.

Relations with Training Colleges

It has already been suggested that one of the most far-reaching aspects of secondary school obligation is that by which it provides the teachers of the future and acts as a preliminary training-ground for them. Few things are more difficult than to assess the qualifications which go to make a successful schoolmaster. It is a commonplace that high academic attainments do not always imply the ability to teach, yet it is easy to overlook their claims. It is, perhaps, not so generally recognised that many boys who play an all-round part in school life feel strongly drawn to a teaching career, not merely because it offers comparative economic security, nor because it is a soft option in default of other openings, but because it appeals, at a generous and impressionable period of development, as a life of service and human interest. Only those who have come into intimate contact with it know the strength of this appeal, but it is at least as easy to make mistakes in the matter of the heart as it is of the head, and few responsibilities should lie more heavily upon the secondary school than the giving of sound and unbiased advice in this matter of the teacher's career. There can be no question that moves have been made in the right direction in deferring the actual time of choice to a later period, in enabling those in training for teaching to feel a less segregated and intensive atmosphere of vocation before they take their university degree, and in making more extensive use of the secondary schools themselves for practice in the more definite year of preparation.

Yet, here again, in a matter so vital to the schools, it is difficult to avoid the conviction that there is room for closer co-operation. The number of candidates both for the university training departments and for the training colleges far exceeds the number of vacancies, and the task of selection is very difficult. A short personal interview and a glowing testimonial form for the most part the material of choice. It would be thought that an intimate and comprehensive knowledge of the schools would be among the first essentials. Here again some advance is being made, and the extreme difficulty of the problem cannot be minimised, complicated as it is by the uncertainty of future policy and the immediate exigencies of economy; but definite efforts to bring together the schools and the training departments and colleges have not been without effect, and it has been found possible to obtain the sympathetic consideration of the Board of Education for certain aspects of the problem.

Relations with other Post-primary Schools

Of the connection of the secondary school with what stands below it on the educational ladder something has previously been said in dealing with the matter of admission; but, just as the secondary school may expect as full a consideration as possible from universities and employers for the products of its system, so in turn it has an obligation to fulfil in its relation with schools of other types.

This was a comparatively simple matter when the elementary school, as such, was definitely homogeneous in character, but the growth of central, senior and other schools has made for greater complexity and the general movement towards the provision of secondary education in greater or less degree after the age of 11 has given rise to the necessity of working out fresh standards of value. It would be idle to deny that there have been misunderstandings or to pretend that the position is by any means clear as yet. Individual local interests and ambitions, the expenditure of public funds, the absence of clear objectives, have combined to give a somewhat unsettled appearance to the direction of some of the newer schools; but, while on the one hand it has become reasonably clear that there is room and need for schools of varying character and aim in the new scheme of development, over and beyond the conventional secondary and elementary type, the fears and anxieties that the secondary school as such would in many places be endangered in its function and its prestige by the growth of the newer schools have been falsified. Parent and legislator have joined forces to promote the possibility of the best chance for every child after 11, and to give the fullest play to facilities and abilities, and in the main the movement has met with remarkably little opposition or criticism. The secondary schools of this country may regard the development with some justice as a tribute to their own work, and have little cause to view with suspicion the newest recruits to the country's educational system. Indeed, the demand for admission to secondary schools has shown a tendency to increase rather than to diminish, nor has this tendency been affected by the recent call upon parents of secondary school pupils to pay fees in accordance with their means. It is clear that the secondary school will fall short of its obligations, both local and national, unless it continues with an even greater sense of responsibility to set a standard in educational value—not, indeed, one which must be slavishly followed, for neither central nor senior nor elementary school will be discharging its proper function along the lines of sterile imitation, but a standard which will be fruitful of suggestion and experiment and whose maintenance will make all the easier that continuity of policy and co-operation without which any educational system must perish.

Civic Character of the Secondary School

Thus far the function of the secondary school has been discussed mainly from the point of view of the school in its own educational setting. There is, however, a wider aspect of its function which cannot be passed over, for the secondary school is not only a unit in a complex educational framework, it is also a civic asset which has a definite part to play as such. To begin with, it is the object of large public expenditure. It is true that many of the bigger public schools are self-supporting owing to private endowments and the substantial boarding fees, but it must be remembered also that much

of the public money expended on secondary schools as a whole is absorbed in providing a criterion of dignity and equipment for which the inspiration is largely drawn from the conditions which obtain in these independent schools. It is a question of standard again, and few things have been more to the credit of local government in recent times than the generosity with which the requirements of secondary schools have been interpreted, especially by the larger county and county borough education committees. They have been called upon not only to establish and maintain new schools, but in many cases to take over entirely or in part older foundations whose endowments have not been sufficient to meet the demands of modern provision and equipment. For the most part this has been done with large-heartedness and understanding.

Thus there are not many secondary schools which are not dependent in some form or another upon public financial assistance, and subject in consequence to some measure of public control. Unduly drastic and narrow exercise of such control might easily lead to difficulties, and might involve the cramping and stunting of schools' individual growth. It is inevitable that instances of strained relationship should occur from time to time, but as a rule the intense atmosphere of incidents of this kind has only served in the end to demonstrate the necessity for reasonableness, and among the more generally accepted axioms of school management are the provision of a distinctive school governing body and the responsibility of the headmaster and his staff for the internal regulation of the school. General expenditure is often augmented by financial provision of a more individual kind, in the form of scholarships, maintenance grants and the like, and most citizens, either as ratepayers or taxpayers, can be said to be entitled to a direct interest in the welfare and development of the local secondary school. The school is in this way the focus of a good deal of local pride and aspiration. It cannot hide its light under the bushel of a hole-and-corner existence. It need not welter in the limelight of intense publicity, but it must face the need for transparent honesty of purpose and method under the scrutiny of parental and civic interest. Indeed, it may attain to more positive standards of public service, particularly in rural districts, but in towns too it may serve as a centre of cultural and intellectual activity. It may offer accommodation and co-operation to humbler institutions and societies; it may cultivate something of the missionary spirit; and for these things, as well as for its abiding symbolisation of the future of the race, it may stand for what is serene and enduring in true wisdom and good learning amid the constantly shifting circumstances of local life.

It has sometimes been complained, and not without truth, that pupils in secondary schools are not sufficiently instructed in the knowledge of existing institutions and processes in everyday life, whether social or economic. It is doubtful how far merely academic teaching in such matters can be given with profit or conviction, but

if the secondary school takes a well-defined and active part in local life, and touches the manifold interests of local conditions at several points, there is every likelihood that the pupils of the school will imbibe the knowledge of living and of livelihood in the best possible way. Development along these lines has already proceeded farther than may be generally realised. Visits of secondary school pupils, on the one hand, to local works and industries, and of folk of local influence and responsibility, on the other, to the school itself, have been a regular feature of many school programmes. Nor is such a tendency confined within the insular limits of our own country. Thousands of secondary school pupils visit various European countries every year. Many of them have been received into Continental schools, and have entertained foreign pupils in exchange. English and foreigner alike meet in school camps, on cruises and in less organised ways of experience and intercourse.

Such achievements as these are not easily measured within the confines of a syllabus or a time-table ; still less can their value be assessed in terms of expenditure, but they constitute surely one of the most vital functions which can be performed and, when they can be linked up with the zest and common interest of school life in all their bearings upon the future, it is doubtful whether anything of more intrinsic and potential value is being contributed to national development at the present time.

Conclusion : Present Achievements and Future Requirements

In these and in other ways pupils of the English secondary school of to-day are learning to pool their assets and aspirations in the common life of the school. Co-operation between parent and schoolmaster has become closer ; the field for the first youthful experience of personal trust and responsibility in school life is always widening. Much money in recent years has been spent wisely on playing-fields and amenities. Here, as elsewhere, games and physical training are being interpreted rather as a means to an end than an end in themselves, and no one with any knowledge of the inner life of the schools can fail to be aware of the immense improvement that is taking place in the attitude of boys and girls towards their personal obligations in this matter. Art and music are finding a respected place among school interests, no longer as detached and formal studies, but as part and parcel of the spontaneous enrichment of leisure and individual development ; and they can teach, as few other things, not merely how to achieve technical skill, but how to appreciate, how to establish and to maintain a lasting sense of wonder, and how to co-operate in the cultivation of all that is lovely and true and of good report. There is, too, a remarkable increase in dramatic interest ; the experience of many hundreds of secondary school pupils in travel abroad, unknown to earlier generations ; the growth of the school library as a vital feature in its existence, and a

natural pride on the part of those who use them in the beauty of school buildings and the value of extended developments. All these things are the concern of governing bodies, education committees, parents, those who teach and those who learn, in a way which has invested the life of the school with a brighter vision and a more glowing sense of purpose.

Viewed thus it is a pleasant prospect, but in the mind of many who survey it there lurks a fear and a doubt. It is idle to count the blessings and yet to overlook the challenge of those who insist on the realism of national security and its implications in the educational system of the country. A nation, no less than an individual, must earn its living. In the mind of too many people such a truism serves only as an argument to urge insistence upon the enquiry whether secondary education does enough to meet the requirements, and keep in touch with the demands, of industry and commerce. But if a seeming lack of co-ordination in this respect may cause the educationist some concern, and if he has his attention drawn to the superiority of other countries in salesmanship and in the scope of technical training—if he is taunted with the number of black-coated automatons and academic mis-fits who swell the ranks of unemployment year by year from schools and universities—can he not in his turn ask whether the requirements of industry and commerce are sufficiently specified, whether more use of secondary school material might not be made by a better informed and more knowledgeable manipulation of it, and whether this of itself might not lead to closer co-operation and a nearer balancing of supply and demand in the matter of employment and educational policy. If the industrialist has to report for the time being that the factor of uncertainty is too great on which to give any stable undertaking, let him not repudiate his responsibility for this temporary, but none the less unfortunate, condition of affairs. Some of the difficulties are clear enough to both sides—the appearance of new world-competitors, the multiplication of production with very little relation to any estimate of the world's needs, the tendency to minimise the element of human labour and make the most of the machine. Herein lies the main dilemma ; in eliminating waste and abolishing extravagant competition the problem of unemployment is aggravated.

Industry and commerce may require special classes and courses, but something further and greater is needed, and this the secondary school can and must give—what is more, it must remain one of the chief objectives of education, no matter how the circumstances of industry and commerce may change, or how confused may be the clamour of demand. A training of mind and body, not for some narrow and specialised purpose, but connoting adaptability, initiative and breadth of outlook—this alone can justify faith in the future and expenditure in the present. No industrial training can help to save the nation that will involve a less liberal education in the school sense.

Freedom and absence of fear may be regarded as two of the main characteristics of what is best in secondary school life to-day in England, but true freedom is based on self-discipline, and fearlessness must be tempered by courage of the right kind. If life for the future holds in store a greater range of human activity and variety, more leisure and an increasing fullness of existence, then men and women of to-morrow will need, above all things the power to discriminate and the acquisition of an instinctive standard of values.

Anyone who is in real touch with secondary school boys and girls at the present time, who knows the conditions of their life at school and at home and can visualise something of the years ahead, must hope for them above all else that they may carry away from their schools an ability and inspiration to live life at its fullest, because in the impressionable years at the school, where they passed from childhood to the beginnings of manhood, they felt the first true stirrings of desire for a man's work, a full life and a human destiny.

E. Percival Smith.

CHAPTER TWO

The Classics

THIS chapter deals with the teaching of the languages, literature and history of the ancient Greeks and Romans as it is carried out to-day in our secondary schools under the influence of the universities. Classical education has always had its critics, and has been the topic of controversies that abound in psychological interest. To review these at large would be out of place in a brief survey, but some reference is necessary to the broader changes in educational outlook, as well as in social and economic conditions, which have affected the position and prospects of classical teaching in the modern curriculum. There is still a vague belief, among a considerable body of the general public, that the classics are a traditional relic, fortified by privilege, but none the less awaiting the inevitable hour when they must yield entirely to irresistible forces of progress. All students of the subject should read two highly interesting documents, to both of which it will be evident that this chapter owes much: *The Classics in Education*, which is the Report, published in 1921, of the Prime Minister's Committee appointed "to enquire into the position of classics in the educational system of the United Kingdom," and the Board of Education's Memorandum, published in 1929, on *The Present Position of Latin and Greek in Grant-aided Secondary Schools in England*, written by Mr. D. A. Macnaughton, H.M.I. The Report of 1921 examines at length the various causes which in the course of half a century had modified the prestige and popularity of Latin and Greek, and its conclusions are by no means free from misgivings. The Memorandum of 1929 is a hopeful estimate, based on indisputable figures and evidence from the ordinary secondary schools of the country, of what the classics are now doing, and may go on to do, for pupils drawn from every class of society. "On the whole," it concludes, "the outlook is distinctly encouraging."

Decline and Recovery of the Classics in Education

Few people have yet realised the startling fact that in twenty-five years our secondary school population has multiplied itself by four. It might have been surmised that, for this vast new multitude of boys and girls, mostly destined to occupations in which the claims of "practical" subjects seem paramount, little or no question of classical instruction would arise. Moreover, the sudden expansion of our secondary system began at a moment when the reaction from the classics, as it used to be called, was most pronounced in English middle-class opinion. The later years of the nineteenth century, with their prevailing and largely justified belief in the importance

of the natural sciences and modern languages, had seemed ominous for classical teaching, and the old grant system, by favouring scientific and technical subjects, had reinforced current prejudice by a financial motive. Another obvious difficulty has been the supply of teachers. Legislation can build schools and herd children into them with surprising rapidity, but tumultuary methods are not suitable to the selection and training of teachers for a realm where instinct and cultural background are as necessary as book knowledge. A classical teacher can do good work without being a first-rate scholar, but his preparation will always need something that is mellowed, rather than forced.

Nobody who has watched national education since 1900 can deny our debt to the wisdom of official administrators and inspectors, whose policy, on the whole, has kept in view one central principle : the principle that education pursues an intellectual training, as distinct from short cuts which offer the illusory promise of immediate equipment for life. Well aware that the great majority of secondary school pupils could in no sense aspire to classical scholarship, the Board of Education has also made clear its belief that an important minority of youthful minds can best develop on a basis of direct contact with ancient culture and civilisation ; and equally it has recognised that the indirect value of such studies, permeating other subjects through the minds of classically trained teachers, is incalculable. Thanks very largely to this attitude of the Board, we find that by 1929 " Latin has established its claim to a secure place in the curriculum of all but a small minority of the secondary schools," and even that " the decline of Greek has been arrested."

Old Vices in New Studies

Public opinion, though fickle in educational matters, often falls back on common sense. The classics are still popularly regarded as a losing cause and a certain suspicion of their influence dies hard, but this is now not much more than a survival, quite different from the reasoned hostility that was so familiar in the heyday of what I may call the early Wellsian philosophy. In the past thirty years two things have happened, and already are dimly apprehended by the subconscious process peculiar to our race. One is, that classical enthusiasts have widened the application of their learning and given it a more fruitful connection with modern ideas. The other is, that weaknesses once thought to be specially inherent in a classical education have become conspicuous in the most up-to-date departments of teaching. When the natural sciences were a novelty, it was hoped they would supply a vivid comprehension of realities, by way of set-off to the verbal pedantry of the old literary curriculum. Experience has now shown that so-called modern studies, ostensibly drawn from life and nature at first hand, have no immunity from the oldest academic vices. It is the foible, not only of the classical teacher, but of all human beings who carefully

arrange knowledge for purposes of instruction, to devitalise their material by trying to create a logical system. We have lost the illusion that new subjects imply a new outlook. To substitute archæology for art, and grammar for literature, has always been the error of professional scholars; but a parallel effectiveness in isolating their pupils from the actual world is achieved by many of our specialists on the "modern" side, who with the best intentions have rationalised their syllabuses in perfect obedience to scientific method.

Significance of Ancient Ideas in the Modern World

In every field of knowledge—whether art or literature or history or science—the primary and natural appeal to young minds is the appeal of concrete things which belong to their own day, and one of the broad aims of education is to encourage an intelligent response to contemporary life. But we no longer suppose that this is just a matter of subjects, superficially old or new in themselves. The conflict between ancient and modern has been superseded. In education the struggle to-day is to bring out human aptitudes with a sense of proportion, in spite of temptations to a narrowing specialism that are almost irresistible in the world's bewildering profusion of new facts and activities. It was by a process of association, rather than of thought, that the late-Victorian critic of the classics demanded a time-table filled with subjects less alien from ledgers and telephones and current theories of evolution. Many business men now admit that the modicum of Greek and Latin in their schooling has turned out to be not less useful than the formulæ of algebra and chemistry: and many a self-educated artisan, whose acquaintance with ancient literature is limited to translations, can feel that the best contemporary thinking is nearer in quality to Pericles than to Gladstone. The general movement of our age indubitably shows a classical revival. Realising the fascination of science and the immense possibilities of machinery controlled by intellect, we also see the danger that attends an exclusive study of physical forces—the danger of a bloodless outlook on the universe. The human character of the classics, which not even the pedant can wholly reduce to abstract terms, corrects this tendency to be preoccupied with things instead of people.

On the æsthetic side, the old civilisations are making a new contribution to modern needs. The twentieth-century artist or engineer, mainly concerned with the reconstruction of our cities and our homes, falls back instinctively on principles that are orderly and architectural. He has emerged from the sentimentalism and confused romance that was often mistaken for art in the nineteenth century, and aspires to make art once more the vehicle of important human and social aims. Thus he goes back inevitably to classical standards, which are "plastic rather than picturesque"; and all over Europe our masters of new constructional design, working largely in new materials, are influenced by the essentially classical

view of beauty, as a product of harmony, proportion and fitness for purpose. The present year sees a new project in the constructive arts—the European Mediterranean Academy—sponsored by three names so well known for " modernism " as those of Wijdeveld, Mendelsohn and Ozenfant : and these men of cosmopolitan outlook define their aim as that of leading " the technical epoch towards the new classical unity." The major creations of our time, arising from its urgent needs, are visual, not literary ; and the art of the Greeks and Romans, interpreted afresh through the consciousness of our own day, has no less importance for us than it had for the Renaissance or for the eighteenth century.

Changes in Classical Teaching

Traditional Methods

It is significant that during the past thirty years, while many other subjects of the curriculum—notably mathematics, science, modern languages and English literature—have given rise to striking movements or manifestos in the direction of change and reform, the teaching of the classics has maintained, for the most part, its traditional matter and technique. It is true there has been a development, in a few very capable hands, of the oral or " direct " method of instruction, mainly if not entirely due to the initiative of Dr. Rouse and his interesting work at the Perse School. But not many teachers have adopted the method in a thorough-going way. Those who avail themselves of it appear to limit its use to junior classes, and even there the majority employ it only by way of supplement to the familiar routine. Mr. F. R. Dale, in a recent sympathetic discussion of this topic, refers to " the crumbs which the half-hearted can pick up from the banquet of the direct method " ; and the majority of good teachers, showing little or no conversion in their own practice, are almost persuaded that it might achieve much in a world set free from early examination tests and well supplied with teacher-scholars of the requisite stature and agility.

A New Spirit

The real improvement that has shown itself in classical teaching is not so much a result of deliberate change in system or syllabus, as a general broadening and enlivening of the spirit by which teachers, inspectors, examiners and editors are actuated. In every good school the classical side owes something to the marked advances that have been made in modern history, and especially in the appreciation of our own literature. We less often encounter what was once a not uncommon type—the deeply-read student of Greek and Roman authors who seemed to live in one compartment, with little sense of the continuity of literature as a whole : ardently admiring and quoting the ancients, but more or less indifferent to masterpieces of English prose or poetry. An optimist may go

farther, and see some evidence that classical teaching in public schools and universities is now more responsive to important non-literary aspects of the culture it expounds. Not long ago, among prominent teachers of the classics, immense erudition and facility on the linguistic side were often accompanied by almost fundamental ignorance of æsthetic principle with regard to such things as Greek temples or sculptures. These matters were left to the specialised archæologist, and very few of our leading scholars had grasped what now seems a rudimentary truth—that Greek culture, to have its due value for the modern world, must be seen through eyes and mind as a biological whole, and not regarded merely as a source of literature and philosophy.

The General Paper in Scholarship Examinations

Some indication of the trend may be gathered from the sort of " general paper " now set to candidates for classical scholarships at the Oxford colleges. Though a wide choice of questions is given, it is evidently expected (or hoped) that good candidates from our sixth forms will show some contact with ideas, not only of literature in all ages, but also relating to social history and economics, to immediate political issues, and to the whole realm of the arts, including music for those who have been touched by it. No mere schoolmaster has ever guessed exactly how much weight is given to the general paper in the scholarship awards. Probably this varies a good deal, according to the *personnel* of the College. But even the capacity to set such questions implies progress and a recognition that something more is desirable in classical scholars than a finished aptitude for turning passages of English prose and verse into a neat mosaic of idioms, happily chosen and considerably thicker on the ground than anybody could find them in any ancient author. We shall see later how modern congestion of the time-table has affected the amount of classical reading that is actually possible in school. Meanwhile, the point here suggested is that recent evolution in our higher teaching of the classics has proceeded by an insensible enlargement of the intellectual scope which a classical education implies. The influence of the Oxford " Greats " school, which has long supplemented what is known as " pure " scholarship by a generous admixture of historical, philosophical and æsthetic interests, has percolated to sixth-form classics with results which more than compensate for some loss of scholarly precision and elegance in the precocious few, by offering to all intelligent older pupils a wider foundation of reading and thinking and seeing for the rest of their lives.

Preservation of Classical Studies in the Public School

It is important to distinguish two different types of school education in which the classics now play their part. The general reader usually associates high classical attainment with what was once

described as " a leisurely course of liberal education, fastidiously gone through " : in other words, with the opportunities offered by some well-known school, preceded by a first-class preparatory school and followed by an old university. No doubt this is still the way in which the majority of fine scholars are produced, and it is to the leading public schools, with their advantages in the way of buildings and environment, staffing, and the heritage of taste which many of their pupils bring with them—all enormous assets in the pursuit of literature—that we mainly owe what has survived of the old tradition, and the high standard of accomplishment that is still required for academic distinction in classical studies. Whatever shortcomings may be charged upon " the public-school system " in itself, no impartial observer can doubt that since the war, at any rate, our more famous schools have enjoyed a conspicuous intellectual revival, in which the classical side has had its full share.

Decay of Classical Studies in the Secondary Day School

The other type, broadly, is that of the grant-aided secondary day school, to which belong both the mass of new secondary schools created since the Education Act of 1902 and most of the ancient endowed grammar schools which continue to be local in character, seeing that their boarders, if any, are in a very small minority. The definite and growing element of classical teaching in the new schools is principally due, as we have already noticed, to the Board's central policy, supported by many heads of schools and by a good deal of earnest propagandism among teachers. Local authorities, as such, can hardly be said to have shown initiative on behalf of the classics. By 1902 the grammar schools, once the strongholds of classical learning, had gone far in the direction of selling their birthright to keep themselves in existence. In 1903 an official report of the Board, based on the inspection of some 70 schools regarded as " typical of the institutions in which those boys are educated who cannot afford to go to the great public schools," informed us that " Greek has practically disappeared from nearly all the schools," and that " in many schools Latin also is disappearing."

Social Changes in the Grammar School

There were, of course, exceptions, in the larger grammar schools whose classical tradition had kept its vigour, and whose size and endowments enabled them to withstand the financial discouragement of literary education under the Technical Instruction Acts. But even these more important day schools were faced with the problem of a vastly changed social constituency. Many grammar schools, within living memory, drew a solid proportion of their pupils from the less well-to-do, but well-read and educated, professional families. In the past half-century this class has gradually deserted the local schools. Modern developments of the free-place and scholarship system have brought a desirable new recruitment

from the more aspiring and thoughtful artisan class, but the fact remains that the historic type of grammar school has been depleted of what was formerly its most effective leavening element, and one that implied also—as the records of the " free " grammar schools in the eighteenth century abundantly prove—a valuable contribution to social unity. It is a truism among experienced teachers that sons of professional men and of good artisans comprise the bulk of the best brains of the country. Literary and classical studies, more than any other, make a call on the susceptibilities which come from heredity and the first surroundings of childhood. Poets and artists are proverbially poor, but I know no recorded instance of a great poet or artist who began life as a first-generation starveling. Some background of books, of ideas, of inherited refinement in the use of words, and of respect for the greater names and works of man, is all-important : and the magnitude of the task which now confronts the grant-aided secondary schools, old or new, can only be measured if we realise that hardly a semblance of general culture, in the sense described, can be found in most of the homes from which the pupils come.

Recovery : Recent Achievements of the Secondary Schools

But slowly and indirectly, through the work of the schools, many of the parents themselves are moving towards a wider outlook. Even in relation to the mysteries of Greek and Latin, where their approval is by faith and not by sight, they co-operate with the teachers in the intellectual as well as the material interests of their children. The Memorandum of 1929 indicates that in the three years 1925–7, the latest period then available, the 205 open scholarships and exhibitions in classics, gained at Oxford and Cambridge colleges by boys from grant-aided schools, represent approximately one-third of all the awards. These were in addition to 46 classical scholarships gained at other universities : and girls from grant-aided schools, during the same period, took 23 open awards at Oxford and Cambridge, and 16 elsewhere. A more recent calculation, for the year 1931–2, shows about 44 per cent. of Oxford and Cambridge scholarships going to these schools.

Considering that the standard of an open classical scholarship or exhibition is determined by the cumulative results of unbroken tradition in the privileged seats of learning, and remembering that classical teaching in the popular schools has been largely an affair of resuscitation or of missionary enterprise, we are justified in saying that such figures are remarkable. It would be interesting to know how many of these successful classical pupils had come originally from primary schools, but it is safe to assume that the proportion was very large. In the face of what has been achieved in the quarter of a century, at a time when the whole system of secondary education has been subjected to all sorts of changes and to so enormous an increase both of pupils and teachers, it would seem ridiculous to assert that the classics have had their day. On the contrary, they

have once more revealed their permanent significance, by proving their adaptability to a new world, in which general progress and happiness will more and more depend on the powers of self-realisation inherent in a democratic society.

Problem of Teaching Staff

The problem of adequate teaching still weighs heavily on all who are responsible for classical staffing in the grant-aided schools. Figures set out in the Memorandum of 1929 show that, of 2,314 teachers taking some part in the teaching of Latin or Greek in 1,109 schools, " 57 per cent. had no higher special qualification than the ordinary arts degree." Of the remaining 1,000 teachers, 818 had taken honours degrees in classics, but the distribution of these among the schools was very uneven, for obvious reasons. While 90 per cent. of the schools include Latin as a regular part of the main course, Greek is only taught in some 20 per cent. The natural desire of an honours graduate who has studied both languages is to teach in a school where both are taught, so that schools which keep Greek and Latin together are able to secure the majority of the well-qualified teachers. Some of the modern universities now give honours degrees in Latin without Greek, and for the time being this may slightly ease the situation. But the real hope lies in the steady number of good all-round classical scholars turned out from the better schools year by year. No doubt the proportion of Greek students, or even of schools offering Greek, will continue to be small ; but the absence of Greek from a school time-table is only an added argument for the inclusion of Greek in the preparation of some, at least, of those who deal with Latin or indeed with any literary side of instruction.

This need is recognised, as is shown to-day by the readier absorption of candidates for secondary teaching who have taken an honours degree in classics, and at the same time, having some qualifications in subsidiary subjects, are willing to work in the ordinary non-Greek secondary school. In his stimulating pamphlet, *The Case for Latin in Secondary Schools*, published in 1922, Mr. J. W. Mackail took a hopeful view of the position with all its difficulties, pointing out that similar troubles had attended the general introduction of science and modern languages into the schools. Premising that Latin, like baths and windows, is no longer the hall-mark of a social class, he urged that learning must precede teaching and that, if Latin were " taught widely and largely throughout the secondary schools," the supply of suitable teachers would in time be forthcoming. Things are better now than in 1922, and it is no unreasoning optimism to foresee great advances in another generation. In the long run, the supply of teachers will always rise to the demand : provided the demand goes deeper than a conventional or statistical requirement and represents a sincere though only half-conscious aspiration in a multitude of minds. On every hand we can see a

growing conviction that, with all the admitted need for technical and vocational equipment for modern boys and girls, there is also an urgent need for well-based instruction in the humanities, getting down to the fundamentals of history and literature and art. The importance of the classics in providing such a basis is not yet explicitly recognised by the public at large, but the idea is there, and is slowly rising to the surface, after years of misunderstanding. We must allow that part of the misunderstanding has been due to our own deficiencies, as classical teachers, in the past.

The Three Types of Pupil

There was some truth in the charge often made against the old-fashioned classical system in the public schools, that Latin and Greek were taught to a mass of boys on the false assumption that all were destined to be scholars. This fallacy, indeed, besets all schemes of instruction devised by specialist minds. Three problems arise in the practical consideration of any school subject, three questions which to begin with, at any rate, should be regarded as distinct. First—What course is desirable for pupils who will go far in this branch of study, and become its depositaries for the future? Second—What course in this subject is manageable for the general run of pupils who can profit by it, to the extent of acquiring useful mental habits, and perhaps a glimpse of something that will help them towards civilised living? And third—What pupils would do well to leave this subject alone, and devote their limited time to more suitable things?

The Language Dunce

A word or two on this third problem, before we touch the others, may not be out of place. Every side of education has advocates who dislike the suggestion that it will not do for everybody. Sometimes, when argument runs high in educational conferences, we are told that pupils who cannot or will not learn a particular sort of subject are "unfit for secondary schools." In a delightful lecture given at Liverpool in 1927, on *The Pragmatic Value of a Liberal Education*, Dr. Schiller developed the view that "whatever speciality we set ourselves to cultivate, we can never afford to neglect the study of language." We need a control of language, he says, "so that we become its masters and not its victims"; and he praises the effectiveness of Latin and Greek in helping us to such a "mastery of the primary method of communication between mind and mind."

Many of us believe whole-heartedly that Dr. Schiller's opinion is borne out by the general experience of countless secondary school pupils, including many who have done only a modest amount of Latin. But a concrete acquaintance with children of this generation has convinced us of the existence of a type which baffles almost all instruction that depends on a logical-linguistic approach. No boy is a half-wit who can detect, apparently by intuition, the most subtle

differences in pieces of external mechanism. Yet hundreds of such boys—definable, perhaps, by the psychological label of "extrovert"—continue to be hopeless dunces on the formal language side of school routine. Inarticulate as they appear, many of them do well in practical life: their ineptitude with school books is followed by a genuine ability to learn from experience. Ultimately, no doubt, they learn to express themselves, on the Socratic principle that every man is eloquent of what he knows. In dealing with such material the duty of the educationist is neither to force it on a Procrustean bed of unsuitable learning, nor to banish it from schools where general benefit is gained, but to invent a school course appropriate to its needs, in the spirit of Mr. Bernard Shaw's axiom that "all education is through activity."

The Classical Pupil

For pupils who show some classical ability, a good deal can be done in the four years between 12 and 16—or better, between 11 and 15—by schools which have to meet the general requirements of the existing school certificate syllabus. It may be of interest to outline a practicable scheme, assuming that the pupils concerned have studied no classical language before they enter on the course, but come to it reasonably well grounded in the simpler structural facts of their own language. For this last proviso no emphasis is too strong. All teachers of long experience will recall their difficulties in taking elementary Latin with children from the primary schools, during the reign of a foolish fad which discouraged English grammar and turned out thousands of children who could not discriminate between the common parts of speech.

The Four-year Course

In the first secondary school year, six periods of Latin (one a day) are taught weekly, and a foundation of accidence is laid, along with the use of a translation book prepared for beginners. In the second, third and fourth years, the weekly allowance rises progressively from seven periods a week to nine. In the second year, the reading consists of selected Cæsar and Ovid; in the third year, of Cæsar and Ovid more directly studied; and in the fourth year, of a considerable part of a book of Livy and the bulk of a book of Virgil. Greek is begun in the second year, and receives also seven, eight and nine periods a week respectively for the three years. As in the case of Latin, no author is attempted in the introductory year; selected Xenophon and Lucian are read in the second year; and the school certificate year will bring (say) 40 chapters of Thucydides and a play of Euripides without choruses, together with a peep at the *Iliad*. In both languages, throughout, continuous exercises in writing, as well as reading, ensure some degree of accuracy.

If the school week consists of about 36 periods, it will be seen that Greek and Latin in the fourth year take up, for these more or less

selected pupils, one half of the time-table. If anybody thinks this excessive, he may be reminded that such pupils have also to pass the school certificate in English, scripture, history and mathematics ; not to mention French, in which as a rule they do better, with fewer periods of teaching, than non-classical candidates. Nor has science been neglected in the four years : for two years they have worked parallel with all others, in the third year they have taken a modified course, and have dropped the subject only in the certificate year. Pupils of corresponding standard on the other side of the school will devote to mathematics and science quite as much time as these classical students are giving to Latin and Greek. If the classical boy so taught has to leave school at this stage and go into commerce, it is hard to see what element of immediate utility he has sacrificed to an education which has probably fitted him to go on reading, and certainly to write a letter more efficiently than his non-classical companion.

The Sixth-form Course

For those who pass with this preparation into the classical sixth form, a full course in classics for the higher school certificate will embrace a solid range of reading. A good plan is to read some books twice for examination purposes, and others once only, for their intellectual value. A typical two years' reading might be : in the first year, a book of Thucydides, a play of Sophocles, a book or two of Tacitus, and a book of the *Aeneid*, all twice, with a single reading of an oration by Demosthenes, an Æschylus play, a book of Sallust, and one of the *Georgics* ; and in the second year, two readings of (say) Plato's *Apology* and *Crito*, two books of the *Iliad*, a book of Horace's *Odes*, and two of Cicero's shorter speeches, with a single reading of such works as *The Frogs* of Aristophanes, some letters of Pliny, and further books of the *Aeneid* and Thucydides. All this takes no account of what is done in the third sixth-form year by a promising student who aims at an Oxford or Cambridge scholarship, nor of private reading throughout the sixth-form years by boys who make good use of their own time in school and of their holiday leisure. Authors like Catullus, Juvenal, Propertius, Lucan and Quintilian, with Greek writers such as Theocritus, Herodotus, Hesiod, Apollonius Rhodius and the *Poetics* of Aristotle, may all be touched in this way, under a master's guidance.

The Synoptic Outlook : History and Art

Quite apart from the discipline of writing Greek and Latin prose, with verse composition for those who show aptitude, it will be seen that any pupil, who thus takes full advantage of what is offered in an adequately staffed school, can make a fairly comprehensive acquaintance with the thought and imagination of Greece and Rome, before he goes to the university or takes up a practical career. Ancient history is inevitably studied in such a course, and

both the school and higher certificate examinations include specific papers on important selected periods. It depends on the masters how far the classical-side pupil, thus described, is brought into touch with the daily life and visual arts of the ancients. We have seen that an Oxford or Cambridge scholarship candidate might win credit for some appreciation of such things; but certificate examiners, perhaps fortunately, have hitherto ignored them. Archæological illustrations are useful in bringing things home; but the higher arts of the Greeks and Romans, interpreted with the help of good modern books and lantern slides, and instructively compared with the arts of Egypt and China and with the main developments of architecture, sculpture and painting down to and including our own day, can serve as an invaluable starting-point in the awakening of impressionable minds to that highly significant side of civilisation, which has been neglected in our too bookish academic culture. The teacher who undertakes such work must be alive to the principles which literature has in common with the more concrete arts. He will show how one age or society expresses itself similarly in all important works of man. And on the other hand, he will teach his pupils to realise how much truth is contained in the saying—"Art is neither old nor new"; in other words, that the best things have a timeless quality, under all changes of fashion and outward form. It should go without saying that classical students in the sixth form will keep up and continually enlarge their English and French reading, if they are to profit by this synoptic outlook in which ancient and modern are seen to be parts of a human whole.

No system of education can create faculties, but a sound education can help to unify them. A liberally conceived and carefully ordered classical course, covering six or seven years in the way indicated, should enable a receptive pupil to start life with two priceless advantages—a sense of continuity and a firm scaffolding of general ideas.

The Rank-and-file Pupil

When we consider what classical teaching is suitable or possible for the multitude of boys and girls, we are faced with hard facts of school organisation. For most schools, certainly for all grant-aided schools, economy of staffing is imperative. Small classes, for pupils up to sixteen, are too expensive. A large school may offer parallel and equally suitable courses, whether for those who can reap full benefit from Latin and Greek, or for those who include in their time-table a substantial measure of Latin without Greek, or for those who are entirely non-classical. But obviously a school which has (say) not more than fifty second-year pupils, all told, will be unable to divide these into three classes. If the supply of teachers with good Greek and Latin qualifications goes on increasing, as it now shows signs of doing, there is no reason why in time the moderate-sized school, which can just manage alternative courses, should not aspire to a liberal admixture of classics in one of the two.

At present, such schools usually do no Greek : an omission we can attribute partly to lack of teachers, partly to a survival of the Victorian fallacy that the classics are less " useful " than other subjects, and partly to the deplorable necessity of concentrating on what is demanded by public examinations. Already we suffer from congestion of the individual pupil's time-table, due to the simultaneous pressure of new standards insidiously promoted by specialist reformers and examiners in many subjects. Our superstitious addiction to the " group system," which now fetters all secondary teaching up to the school certificate, has aggravated the evil, forcing the heads of schools to take a line of least resistance and robbing them of their freedom to consider purely educational values. For most schools, therefore, the only classical problem which enters into practical politics is that of a suitable course in Latin, carried if possible to the higher certificate for more proficient pupils. According to the Memorandum of 1929, about one-third of our secondary schools are equipped for higher certificate Latin, though in many schools this advanced study is only possible in very small groups, or for single pupils. It will be imagined that in such conditions the lot of a sixth-form teacher is not a happy one, as very often he must deal with learners of quite different stages in the same class.

A Four-year Latin Course

The future of advanced Latin can only be assured by a sound policy in the main four-year course. A body of Latin teachers, all engaged in typical secondary school work, are quoted in the Memorandum as agreeing that a minimum time provision in a four-year course should consist of five periods a week in the first and last years, with four periods a week in the second and third. These are modest demands, and the wonder is that many schools should long have been content with meagre allowances of Latin that amount to no more than playing with the subject, and which (as the Memorandum says) are " obviously incompatible with any reasonable standard of attainment." Three-year courses, which at best are inadequate, can only be excused as one of the many bad results of a too late transference of boys and girls to the secondary school. In the serviceable four-year course, two years are occupied in grammatical training and simplified reading, followed by two years in which an acquaintance is made with Latin authors.

The value of Latin is half lost unless such reading is enlivened by some comprehension of Roman daily life and the place of Rome in the story of civilisation. In this respect, all children in primary and preparatory schools might well have a more useful grounding from their history and reading-books. More should be made of books like *Tales of Troy*, or *Tales of the Greek Seas*, which furnish a child with some imaginative background of the ancient world and its ideals. Every teacher knows the advantage of early familiarity with outstanding names of classical history and myth. So long as

the learner is inevitably doomed to an examination in his fourth year, it is of the first importance that his reading of authors for that purpose should be something more than a tedious act of assimilation, in which—to quote the words of Prof. A. N. Whitehead,[1] a mathematician and man of science whose views on classical teaching are most sympathetic and suggestive—" the noblest poetry in the world collapses into a rubbish heap." Hence the danger of a cramped provision, which may mean that the only Latin author a pupil knows is the author whose text must be read with one eye on the examiner.

Aim of the Course

Most boys never reach the sixth form and, if their limited Latin is to be more than a dry gymnastic, it must be taught with constant reference to our own language and literature. The smaller school, which has the educational advantage of being unable to specialise its teachers, can often put Latin and English in the same hands. Prof. Whitehead boldly advocates more use of translations, along with the normal direct study, in giving to this class of learner some living idea of the originals. He observes that great scholars, whenever translations are mentioned, react " as do decent people in the presence of a nasty sex-problem " ; but he gives his own opinion freely, " as a mathematician who has no scholastic respectability to lose." Where Latin and English are co-ordinated by one teacher, the help of translations may readily be called in, to impart a wider view of what the Latin author signifies. Even in a short Latin course, with necessarily limited aims, it is important to realise that careful teaching can give, to each successive stage of the work, its own educational value. There are scholars whose whole attitude, with regard to this Latin teaching in the popular schools, can only be described as grudging. They seem to think that a little is no good at all, and they forget two things. One is, that in any living and progressive movement, such as the classical movement in our schools to-day, a little is only a beginning. The other is, that we want to spread wide the opportunity by which any child, born with the gift of response to great works, may get his first impulse towards classical beauty. Judged by the scholarly standard of his time, Shakespeare had little Latin. Keats, because he had not received a formal classical education, was sneeringly accused of " rhyming Lemprière " ; yet he united Greek feeling and English romance with a power of style which mere scholars can only envy. It is surprising from what elementary material, it may be only hints and glimpses, a gifted child can take fire. Heads of schools and teachers, who under difficulties are trying to bring the classics to the multitude, must not be discouraged by any disdainful all-or-nothing argument.

[1] *The Aims of Education, and Other Essays*, A. N. Whitehead (Williams & Norgate, 1929).

Conclusion : The Virtue of Simplicity

A judicious believer in the classics as an educational instrument will not disparage the importance of subjects which have their birth in the facts and needs of our own time. But if he has to answer the reasonable query—What of the Greeks themselves, who studied no dead languages ?—he will reply that we, unlike the Greeks of the golden age, are living in an age of intellectual chaos and confused standards. Our language itself is in process of corruption. In the days of its integrity, the Bible gave it a standard and an inspiration : the classics may yet bring to bear a clarifying influence. Immense new tracts of history and science now call for research, but in these accumulations of learning it appears that basic principles are easily overlaid and forgotten. Most subjects, owing to their complexity and perpetual change, must undergo a conscious simplification if they are to be available for school teaching. The classics offer a naturally simplified bird's-eye view of historical, political and intellectual truths, seen once for all in concrete demonstration. For European mankind, study of the classics amounts to self-knowledge. At one time it was held that a classical training was the right thing for rulers and administrators, who need an understanding of men. In these days of free institutions, we require some such understanding of every competent citizen.

It is true we can never go back to a homogeneous classical culture, like that of the eighteenth century. Indeed, we now think that in many ways the eighteenth-century perception of classical meaning—in Greek art, for instance—was not very deep. But along with what science is doing to enlarge our survey of the universe, and with all the technical advances by which modern speed and comfort are ensured, there remain the bed-rock laws of human nature and society ; and for knowledge of these things, no better starting-point has yet been devised than study of the works of Greece and Rome. We look for no immediate nor striking increase in the actual number of highly specialised classical scholars ; but we believe that the humanising and stimulating function of the classics, directly taught or indirectly making their influence felt, is destined to wider recognition in the educational renaissance which lies not very far ahead.

J. E. BARTON.

CHAPTER THREE

Modern Languages

THE position of modern languages in the public and secondary schools of to-day is one that has aroused both enthusiasm and despair. The teaching of a foreign language came fairly late into the school curriculum and can rely upon no traditional technique, as is the case with the Classics and Mathematics. The modern language makes tremendous demands upon the personality, the equipment and the resource of the teacher. Those who teach Latin cannot be confronted with the patrician or plebeian of ancient Rome, but their colleagues teaching French are often tested by the arrival of a native. For the past two decades, the modern languages course has been the happy hunting-ground of the experimenter, the faddist and even the charlatan, and the desperate need we find to-day of shedding our insularity by acquiring contact and co-operation with our European neighbours has caused much heart searching as to how best we teachers can give the youth of this country the means of direct communication with Frenchmen, Germans and Spaniards.

Limitations of the Spoken Word

We cannot do better than ask ourselves what is our conception of a modern language in an English school. First and foremost, we must admit that French, German and Spanish are living languages spoken by millions of people on this planet. As such, we must distinguish them from dead Latin and Greek, and realise that, if our teaching is to bear fruit, we must stress the importance of oral work. In an endeavour to make the classroom an authentic corner of France, Germany and Spain, however, there has been in some quarters too much insistence upon parrot-like repetition, and some of us have felt a little doubtful about the permanent value of these railroad and hotel scenes of which the direct-method experts have made so much. Quite seriously, is this spoken word, this *se faire comprendre*, this waiter-cum-porter ideal, sufficient? We must remember that a European people has a cultural background, and to be blind to a people's history and literature is to remain for ever a stranger to their national character, to understand which is surely one of the most important aims in our teaching. Again, in every language, sooner or later, the question of accuracy must be faced. Grammar and syntax must have their place in the scheme. The all too prevalent sloppiness of modern English finds an excellent corrective in the precision of French. The problem of the written language must be tackled if our pupils are to use their languages profitably in the commercial world.

As language is a collection of words to express ideas, we must remember that, if our teaching is to be competent, the word must be taught in all its aspects. For example, we must teach the pronunciation, the spelling and the meaning of a word, or phrase. Our pupils must know how to use it; that is, its grammatical and syntactical application should be fully grasped. It ought to find its way into the active vocabulary of the pupil who, not only able to use it himself, must be able to recognise it when it is pronounced by somebody else. In the case of many words, the question of derivatives, adjectives, adverbs, verbs formed from substantives, requires attention. Now, the great thing for the teacher to remember is that, in a living language, pronunciation, meaning and comprehension do not come in isolation. If we are to hand on to our pupils anything like fluency and accuracy in written or spoken language, we must incorporate in our teaching all these varied aspects of the word. How can the teacher accomplish this ?

Exaggerations of the Direct Method

Here arises the burning question of method. The out-and-out Direct Method, where the teacher scorns to interpolate an English word in his lesson, must be recognised as a very ideal conception of approach to a foreign tongue. If it is possible for an English pupil to recapture all the impressions and linguistic experience of the foreign child in x periods of y minutes per week, then there is a strong case to be made out for it. But many teachers feel that it is a highly difficult matter, and one that calls for much resource and even artifice, for an English man or woman to teach a foreign language to English children in an English class-room. Sensible teachers will want to adapt their exposition of the subject to the conditions they find around them. Experience has shown that whole-hoggedly to follow the Direct Method can be, with forms of average intelligence, a very risky proceeding. The realist can have little patience with the teacher who, after finding that his class does not understand *il faut ouvrir la porte*, screams out *il est nécessaire d'ouvrir la porte* and, thus achieving comprehension, deludes himself that his method has awakened no English in the child's mind. Nor can one permit the annotator who explains one unknown word by the use of another equally unknown to imagine that he has surmounted the difficulty. The writer has seen a class lured to the belief, by a voluble German explanation accompanied by gesture, that *das Gebirg* meant a serpent! Surely we ought at times to remember that the most direct method to overcome a textual difficulty is to supply the English translation. Right as the Directists undoubtedly are when they insist upon pronunciation, intonation, cadence and rhythm as vital factors in the learning of a language, less rigid adherents to that linguistic ideal are equally right when they claim that solid foundations of complete understanding are necessary, and that the *à peu près* or only half-realised

sense must lead to those blurred impressions against which every writer on educational method, since Thring, has railed.

The purely Direct Method can be safely adopted provided the right type of teacher and class is forthcoming. The method by its very nature presupposes a teacher of intense vitality, of robust health, and one endowed with real fluency in the modern language he teaches. He must be resourceful in the way of gesture and tricks of facial expression, able to sketch rapidly on the blackboard, and, in the long teaching day, he must be proof against linguistic fatigue. And he must have bright pupils. My own experience has taught me that in a school of four hundred pupils, only one form in each year—in a school of a thousand, two forms in each year—can receive such instruction, and this, provided the teacher is forthcoming. In every school there is a wide margin of lower grades and, in formulating a Modern Language programme, we should remember that these children are entitled to receive something from a study of French, German or Spanish.

Rational Method and the Average Pupil

Surely a more rational method can be worked out, one that will stimulate the brilliant and yet be within the grasp of the less clever child. At least, after a four- or five-year course of study, a pupil of quite ordinary attainments might be expected to read in the language with a pronunciation that will not do violence to the ear of a native, to write a simple account, and to sustain a conversation on everyday topics. In weighing up the merits of the teacher and the pupil, we must not overlook the time factor. In these days of classes of thirty-five pupils, when five periods of forty-five minutes are allotted as a minimum to the first language in the first year, followed by four in second and third years and five again in the fourth and fifth years, the Direct Method, rigidly excluding a word of English and teaching all grammar through the foreign language, does not carry the weak pupil far. The writer claims that a compromise method, one that does not scorn to explain a real difficulty in lucid English, but one that never loses grip of the foreign language, that uses it wherever possible and aims at pronunciation, conversation, and grammatical accuracy in written work, is a possible solution. Each lesson should aim at affording some practice in all these sections : to isolate any one must tend to destroy linguistic fabric. If we are teaching German, let us teach as Germanly as possible ; let us consciously create in our classroom a German atmosphere. Let Henry become Heinrich and Mary Marie, and let them hear all class directions in the language they are trying to acquire ; but let them proceed step by step under the wise guidance of a teacher who will not befog them in the name of some pedagogical shibboleth and, when passive voice and modal verbs come along, will not put them off with meaningless German explanations when clear English, in a few minutes, would make foundations secure.

The Choice of a "First" Language

Before we approach the vital question as to how and when we ought to begin to teach a modern language, it would be well to say something about the choice of our "first" language, because to-day, in nearly all public and secondary schools, more than one modern language finds a place in the curriculum. Before the Great War, and certainly since that catastrophe, French has secured in our schools a predominance that has aroused, in some quarters, serious misgiving. Why English schools should choose French as the first language is perhaps obvious. The French are our nearest neighbours. The language appears easy, and in grammatical construction differs not too widely from our own. French culture and political thought have played an overwhelming part in European history. The French language by its elegance and precision affords valuable study to those whose mother tongue is more tolerant of slackness of expression. French is the acknowledged language of diplomacy. In England, it has always been identified with the arts, and—dare we say it?—the social graces. In days when education aimed almost exclusively at accomplishments and the utilitarian question could be comfortably ignored, French was a precious social sop. It may, of course, still be argued that French, once mastered, makes possible the easy acquisition of Italian and Spanish. Unfortunately, this ascendancy of French has meant the relegation of German to a comparatively limited number of pupils in our schools. The number of pupils offering French in the First School Examination compared with those offering German leads one to the belief that German is woefully neglected. German, a most important language, both from the literary and the commercial standpoints, ought not in every school to be the "second" language. The writer sees no reason why in a large school, adequately staffed, German, Spanish and French should not become each in turn the first language taught to pupils beginning the school course. Certain industrial areas, it must be remembered, have definite claims upon either French or German or Spanish and, in making his school of real use to the community, a headmaster may find himself compelled to select as "first" language that which is most in demand.

At what Age to Begin?

Whatever language is selected as the "first" language in the curriculum, there still remains the question of the age of our beginners as well as the size of our classes. In some schools, mainly with the idea of pacifying the fee-paying parents with the thought that their offspring are receiving a higher education, teachers are called upon to give class teaching to little boys and girls under 10 years of age in the intricacies of a foreign tongue, a task which the tender years of their pupils often makes wellnigh impossible. Experience shows that at this age most children would do better to

devote the time to acquiring a more fluent and accurate expression of English. Class teaching of modern languages under such conditions can seldom be really serious, and the wise teacher, saddled with these young charges, will do well to make his lessons as recreative as possible. Perhaps something may be attempted in the way of phonetic drill, short songs and poems, and games involving a simple memorised vocabulary. If anything more difficult be undertaken, the result will not only be depressing to the teacher, but will rob the subject of its freshness and interest when the child reaches the normal age for its study. And what of the size of the classes or sets for modern languages ? If they could be limited to twenty pupils, conditions would be admirable for oral work. Unfortunately, at the present time, the modern language specialist in the secondary school has to face the problem of teaching classes of thirty-five pupils. Such numbers handicap severely successful oral teaching and add, in the upper forms, a burden of marking that makes heavy demands upon the conscientious master.

The First Month of a Five-year Course : Phonetic Introduction

Assuming, therefore, that our beginners' class numbers thirty pupils with ages ranging from 10 + to 11 +, and that a five-year course has been designed to cover the subject up to and including the First School Examination, we are now faced with the problem of how to start our instruction. It is a very good plan to give during the first lesson, after some talk about the country whose language we are to study, an imitation of a foreigner speaking English with a strong continental accent, and to applaud his faultless English. The class realises that, while the foreigner has certainly made himself understood, he has done violence to the pronunciation of our tongue. They realise that he has been using French or German vowel sounds in English words and with ludicrous results. If our pupils are to avoid this error, it is necessary for them to acquire accurately the vowel sounds of the new language. Most teachers are agreed upon the value of the phonetic start, this isolation of the vowel sounds that can, in the hands of a good teacher, himself equipped with a good pronunciation, lay the foundations of a good accent, where not only vowels and consonants are well produced, but also intonation receives attention.

Now, this phonetic start can come only from the teacher. The mere writing of phonetic symbols upon the blackboard does not automatically, as some teachers imagine, impose upon the class a perfect sound. We must remember that no teacher can hand on to his pupils a pronunciation better than his own, and that it is possible for teacher and taught to write correctly screeds of phonetic script without either achieving a good accent. The phonetic symbol is valuable in communicating to the eye a picture of an isolated sound. It is, however, not the sound itself. It

bears to the actual sound something like the relationship which the map of India bears to India itself. We are not out to write sounds ; our business is to pronounce them.

Opinion differs widely as to how much time should be spent upon phonetics in the early stages. Some maintain that a month is ample, others require a term, and some there are who would even ask for a whole year. Personally, I have never allowed more than one month, at the very outside, for this phonetic start in French, phonetically a difficult language ; but let me hasten to add that I never begin a modern language lesson without a three-minutes' phonetic drill, a practice I find absolutely necessary if the class is to tune in to a reasonable pronunciation. Experience shows that, if too much time is spent in phonetics and phonetic script, difficulties arise when the child is called upon to tackle normal spelling. By numbering the sounds, by the pupil's use of a small pocket mirror to correct lip positions, and by the simple device of writing the symbols in coloured chalks so that no confusion may arise with normal orthography, phonetics can be taught with a minimum of script writing. Recognition and pronunciation of the sounds are really our aim, although useful work may be done by writing nonsense words or odd phrases with a view to testing, from time to time, the pupil's ear.

When a month is mentioned as the period set apart for phonetics, it should be remembered that something else is attempted in that time. Forty-five minutes per day, over that period, exclusively devoted to phonetics, is enough to damp the ardour of any class and to give the subject a bad start. The pill can be sugared by giving each pupil a French name—Constantin, Antoinette (excellent sound practice !)—by handing on the names of common objects in the classroom, by teaching simple class directions, and by daring to break the ice of *être* and *avoir*.

The Elements of the Course

Having decided in favour of a phonetic start, we must now direct our attention to the linguistic elements we are to stress in our programme. The choice of a textbook for use in the early stages is important, and here the teacher is bound to be guided by his own preferences. There are some masters who dispense entirely with a book, and allow their pupils to compile their own primer. Whatever defects a textbook may have, we ought to remember that it at least possesses the very real advantage of mapping out a course which can be accomplished by the average child. The choice having once been made, it will be found a wise policy to stand by it. Whatever the modern language and whatever the book, we must incorporate into our syllabus daily pronunciation exercises, memory work, conversation practice, free composition, dictation and, of course, grammar. Whether phonetic symbols are used or not, there ought to be, in every modern language syllabus, graded

pronunciation exercises ranging from isolated vowels, passing through vowel and consonant groups, and reaching fluency and intonation exercises well before the end of the course. Memory work should receive attention. The teacher can select verse or prose passages of suitable difficulty and value and, if the class reproduces them with a good pronunciation, something has been accomplished in the way of teaching rhythm and cadence as well as giving the pupil the feel of the language. For the musical there are always songs and, if a little taste be expended upon the choice of poems, these memorised passages can acquire an æsthetic value for the pupil when he has been initiated into literary study in Sixth Form work.

Conversation

If a modern language is to be taught with success, practice in conversation should find a place in every lesson. One of the most frequent criticisms levelled against modern language teaching in England is that, after the first year, oral work shows signs of wilting and, instead of those delightful brisk question-and-answer passages, we find dull talks on grammar and slabs of " reader " indifferently pronounced and badly translated. It is, of course, a fact that after a year the subject has lost something of its novelty, and there is, on the part of the child, a growing self-consciousness that makes questioning in a foreign tongue very heavy going. In many schools this difficulty is avoided by the energetic and resourceful teacher who never allows it to arise. If conversation practice is made a matter of routine, and is treated continuously and progressively throughout the school course, the tongue-tied state, so often complained of, would not exist. The *was ist das* and *qu'est-ce que c'est que ça* approach can be preserved and, by merely having the " reader " turned face downwards on the desk, the teacher can, by working through the language, test the comprehension of a paragraph and keep conversation alive. If our course is successful, the conversational powers of our pupils should increase with the years, not decrease.

Dictation

In any language, dictation is a most valuable exercise. Although some teachers are inclined to regard it as a phonetic exercise, sooner or later dictation becomes a test of grammar. To the beginner it affords excellent scope for accuracy. The pupil is not merely concerned with spelling, but with all sorts of intricacies—accent, cedilla, umlaut, tilde. In the first two years, unseen passages for dictation are much too difficult. Some known passage should be selected, at least once a week, and, suitably broken up into breath groups, delivered to the class. The seen passage has the great advantage of reminding the pupil that in modern languages the eye plays a great part, and the cultivation of a visual memory is well worth while. In the third year, the unseen passage can, with reasonable

safety, be essayed, and for the later stages a useful device is for the teacher to read a short passage and ask the pupil to write it out. A simple anecdote or description will be found best suited to this type of dictation. It should, of course, be understood that correct variations of the passage would be accepted where memory fails. The test then borders on free composition, of which more will be said later. A word about the correction of dictation. The wise teacher will never permit books to be changed amongst pupils for this purpose. The pupil, in the name of linguistic accuracy, should correct his own script and thus concentrate upon his own mistakes, without allowing the correct image to be blurred in his mind through the errors of his neighbour.

Grammar

The amount of grammar taught and the sequence of its teaching must necessarily depend upon the choice of the textbook. We can, however, say that, for the " first " language, three years are sufficient for the mastery of grammatical and syntactical foundations. If a little care is taken in mapping out the English syllabus, grammatical difficulties—for example, the subjunctive mood—can be so timed that treatment in the pupil's own language precedes instruction on the same point in the foreign tongue. Much waste of time due to overlapping is prevented if modern languages, where possible, are correlated and a uniform system of grammatical terminology is adopted. In teaching the modern language, we must never lose sight of the fact that we are imposing upon the child mind new linguistic patterns. The *I sing*, *we sing*, *you sing*, *they sing* of English become *je chante*, *nous chantons*, *vous chantez*, *ils chantent* in French. Teachers of experience know how difficult this pattern is to impose. Not only must we stress form, but there is always the difficulty of function. Full grasp of the function of the French Imperfect or Past Historic, for instance, must follow mastery of its form.

The pitfalls of agreements can only be avoided by the teacher insisting on a thread of revision running through the fabric of the course. To isolate any grammatical section for one term's work is to permit a serious leakage. The language must be kept alive as a whole. It is possible for children to recite grammatical rules and be unable to apply them correctly. It is this divorce of theory from practice that has been the curse of modern language teaching in England. In the first and second year of the " first " language, and in the first year of the " second " language, free composition, written and oral, is perhaps the best means of making active and permanent the grammatical elements of the new language. Short English sentences or passages may be set for translation into the foreign tongue, but these, in the writer's opinion, should be very sparingly and guardedly used. They can become, so to speak, a barometer of accuracy and the teacher can gauge by the errors of his class how far he has succeeded in imposing upon English the foreign pattern.

Regular translation from English into French or German can with profit be held over until the third year in the " first " language, and until the middle of the second year in the " second."

Composition

Free composition has already been mentioned as being important in securing grammatical accuracy from our pupils. We must also remember that free composition affords documentary evidence of the extent to which the child has gained power of expression in the foreign tongue. In estimating the standard that can reasonably be expected, we must not overlook these facts. The English child, on an average, receives in a modern language 220 minutes' instruction per week ; his vocabulary must perforce be limited, his ideas still more so, and his linguistic memory is far from perfect. Realisation of these facts will certainly prevent a teacher from airily setting a composition to be written in a foreign language without first affording ample scope for his pupils to gain practice in this difficult exercise.

In the first year, free composition is not " free " at all. It is an exercise in reproduction, where the pupil chiefly remembers what he has seen in the textbook or on the blackboard. At this stage we cannot hope for more than six, or at the very outside, eight sentences dealing with the simplest subjects in the primer. In the second year, if our pupils are making progress, free composition should show an advance. We should begin to aim at sequence in the composition and, by means of a *canevas*, some simple *récit* or episode might be essayed. The *canevas* should give the verbs in the infinitive, and this device ensures an exercise in any tense the class may be working at. The weak pupils often produce a summary effect by doing no more than follow the outline. The better pupils always add their own individual touches and really begin to make strides towards definitely " free " composition. The length we look for is a paragraph of one hundred words.

At the beginning of the third year, the wise teacher will make a determined effort to wean the pupil from the reproductive exercises just indicated. If an anecdote is read and used as a basis for composition, the pupil can no longer rely upon the eye. The great thing is to make some difference in the method of approach. An incident from the " reader " can be treated from a different angle. Another useful plan is to dictate a passage dealing with some interesting situation and, the child's imagination or curiosity once stimulated, it becomes a delightful and possible exercise for him to finish the story. This dictation of a provocative paragraph has been most successfully exploited for free composition. Again, it is important to remember that the choice of subjects for this third stage ought to show some advance upon those set in the preceding years. In every modern language course, the subjects for free composition can be most carefully graded, and made to bear some relation to the ideas acquired from reading and the increased power

of expression that comes from the grammar and syntax studied. By the end of the third year, our pupils' free composition scripts should show a length of some 150 words.

In the fourth year, some different form of attack can be devised. The experience of examiners leads one to the conclusion that there exists, all too frequently, monotony of expression and paucity of ideas. The time has now come to instil into our pupils ideas of elegance and style. The optimistic teacher is inclined to believe that these ideas will come from contact with good texts. Unfortunately, boys and girls can be very unobservant, and beauties of style can be brought to their notice only by a study of a paragraph written by a stylist. If pupils are made to realise that, in a well-balanced paragraph, every sentence does not begin in the same way, that there are other verbs than *être* or *sein*, that by merely using introductory conjunctions they have laboriously acquired, variety and lightness can be imparted to their compositions, the charge of jejuneness will not arise. The maddening monotony of *il avait . . . il avait . . . il était . . . il était . . . il était . . . il avait . . .* , can be corrected if the teacher is strong enough to insist on this ringing of the changes upon dull sentences all built upon the same pattern of subject and verb. Again, at this stage, emphasis should be laid upon ordered arrangement of thought. The *plan* must precede the writing of the composition and the pupil's ideas can be developed by a choice of subjects calling for a definitely individual treatment. Two hundred to two hundred and fifty words can be expected at the end of the fourth year.

Marking

And what of the marking of compositions? It is a good plan for the teacher to have some system to differentiate between the varying degrees of error. A child by a glance at his corrected exercise ought to know whether his errors are really grave. This fact can be brought home to him by underlinings, rings and comments. It is very doubtful whether pupils can tackle more than six errors per composition, and the harassed master will do well if he attacks the serious errors and deals with them before his class when exercise books have been returned. He can compile his own Black List of unpardonable linguistic sins and, if this list appears, duly numbered, at the back of the child's exercise book, marking can be reduced to a mere numbering in red of the heinous mistakes found in the composition. Only those who teach modern languages know the bugbear of marking, and it seems a thousand pities that a teacher should exhaust himself in meticulously marking unimportant slips. His onslaught should be reserved for the gross blunder.

Translation

Translation from a foreign language into English is an exercise of no mean difficulty. This type of test should not occur in the

early stages of modern language study, when actual translation interferes with working through the foreign tongue, and ought to be reserved only for isolated phrases, idioms or difficult words, in order that the teacher may be sure of a pupil's comprehension. In the third and fourth years, it is desirable to give practice in turning into English a passage of French or German. In English schools, the mistake is often made of allowing this type of exercise to be done orally. A rough-and-ready idea of a passage can be achieved in this way, but the version, as English, usually fails. Careful translation into really good English is a fine art and, if the doctrine of *le mot juste* and the importance of the *nuance* are to be instilled, this exercise demands as much discipline in the way of linguistic accuracy as translation from English into a foreign tongue. It is an admirable plan from time to time to ask a colleague teaching the same pupils English to mark such translations simply upon their merit as exercises in the mother tongue. The modern language master concentrating upon the French and German may overlook roughness in English that becomes apparent to one who has no access to the original foreign passage.

The Need for Good Texts

It may not be deemed untimely to make a plea for " readers " of real literary merit. Time is too precious to waste upon translating passages from mediocre authors. The " rapid reader," with its brisk adventure story, has its place in the school course, but alongside it should exist well-chosen texts whose literary merits are beyond question. The cultural side of modern languages can be fostered through careful English translation of striking passages that occur in such masterpieces.

Modern Aids to Teaching

In space so limited, it is impossible to treat fully those aids to modern language teaching that are daily gaining ground in enlightened schools. The wireless and the gramophone now bring into our classrooms perfect French, German and Spanish. Their introduction from time to time serves as a standard corrective both to teacher and taught and, in the case of the gramophone, the teacher can have repeated anything from isolated vowels to bravura passages of verse and prose. The value of school visits abroad, correspondence with continental boys and girls, and those " exchanges " arranged through the French and German authorities, cannot be praised too highly, not only as means to heighten interest in the language, but to secure contact with the people who speak it. The French and German " assistant " system which the Board of Education has sponsored can be mentioned in passing as a definite and successful attempt to stimulate the oral side of modern language teaching in English schools.

Conclusion

For one great omission apologies are due. In these remarks, nothing has been said about the content and problems of Sixth Form work. The reason is obvious. Modern language teaching to post-matriculation students, if it is to receive adequate treatment, requires a full-length article. In attempting to set down a few ideas on method and procedure, the writer has been actuated by a desire to be practical. In his opinion, it would be rank charlatanism to draw up a programme of perfection which the conditions existing in our schools to-day would make impossible. Modern languages were never more needful than they are at the present time. If we, as a nation, are to hold our own in European affairs, we must shed our insularity and enter the European arena, whether of politics or economics, armed with the power of expression that our continental rivals have found such an asset. Our universities must look to it that our schools are supplied with modern language teachers well qualified in the languages they intend to teach and, with more insistence upon the spoken word and a little less upon philological niceties, surely a type can be evolved capable of dealing competently with the teaching of modern languages to English pupils.

H. F. COLLINS.

CHAPTER FOUR

NATURAL SCIENCE

The Time Factor in Education

THERE can scarcely be a fact more readily admitted than that from seed-time to harvest a natural period of time must elapse. In the exactly parallel case of education, this time interval—at least one generation—is often forgotten and much criticism is invalid or even unfair because it is misdirected.

Science is practically the newest subject in the curriculum and probably the most criticised. It may be that it has not yet outlived its somewhat troubled youth, and it may be that the most has not yet been made of it as an instrument of education, for it has not behind it centuries of tradition like classics and mathematics.

The Beginnings of Science Teaching

Science first made its way into the school curriculum early in the reign of Queen Victoria. It came in a very humble fashion, though strictly in accordance with classical tradition. It was brought round, partly in carpet bags, by peripatetics, calling generally fortnightly, or oftener if required. These popular lectures, however, bore some fruit. The late Sir William Tilden used to say that it was the bleaching of his own red pocket-handkerchief by one of these visiting lecturers that set the seal on his future career ; another famous chemist was similarly moved by the beauty of the colour of iodine vapour. That chemist, in later years, discovered mauve, the first aniline colour. This, of course, is the more favourable side of the picture.

Until the Act of 1902, secondary education was mainly confined to public schools, grammar schools and similar endowed foundations. So far as can be ascertained, the first full-time science master was Thomas Hall, who was appointed to the City of London School in 1847, and remained in office until 1869. He was provided with a lecture theatre and " something that might be called a laboratory." In reality, this was a passage or subway leading to the lecture theatre ; it was restricted in use to " such experiments as were not unusually unpleasant." Clearly, Thomas Hall taught chemistry.

In what was then another section of the educational scheme, afterwards called Higher Grade, the Bristol Trade School was opened in 1856. Here boys of 12 *plus*, though they were not then so called, worked in the laboratory and workshops attached to the school. The practical course consisted of qualitative analysis and simple explanatory experiments in chemistry. Physics was also studied practically. This is a very early mention of that

branch of science, for, at first, chemistry was decidedly more popular.

Though the personality of Dr. Arnold of Rugby, together with that of some other eminent Victorians, has been a little roughly handled, he was indeed a great and far-seeing Headmaster. In 1840, he encouraged the Rugby boys to start a museum by bringing back after the summer holidays specimens of rocks from their own neighbourhood. A local doctor then gave lectures in science until the Rev. Henry Highton was appointed to the staff. Highton was succeeded in 1859 by the Rev. J. M. Wilson, afterwards Canon Wilson, who has left an interesting account of his early work. " I taught," says Canon Wilson, " in the cloak-room on the ground floor of the Town Hall, which was furnished with tables and chairs and a cupboard containing apparatus for illustrating elementary optics, hydrostatics, mechanics, heat and some good electrical apparatus, a subject in which Mr. Highton was an expert."

In 1863, a Royal Commission was appointed to consider the curricula of the nine public schools ; their report was published late in the year. They recommended that all boys, during a part of their school life, should learn some branch of natural science, and that this should be *either* chemistry and physics *or* physiology and natural history. We begin to see how the much-lamented division of science arose, leading in these days to what is called neglect of biology.

The effect of the Report of this Commission was, at Rugby at any rate, rather startling. Dr. Temple at once made plans for two hundred and fifty boys to begin science in the autumn term, in addition to the fifty who were already doing it. Improvisation on such a scale is astonishing to us, particularly in view of the great dearth of trained science masters that must then have existed. The Rugby experiment is worthy of remembrance, if only as a fine object lesson of what may be achieved by resolute enthusiasts not unduly perturbed by the fear of making a few mistakes.

However, notwithstanding the Report and the doings at Rugby, the introduction of science into public schools generally was still delayed, and no more was done in some than was calculated to be sufficient for the avoidance of scandal. Cheltenham and Clifton were exceptions. In 1859, nine forms at Cheltenham were being taught geology, while the highest form on the Military and Civil side was devoting time to " experimental and natural science." Clifton College was founded in 1860. Chemistry and physics were included in the curriculum. Chemistry was taught by Prof. Tilden and physics by Prof. Worthington, whose Elementary Practical Course has proved the model on which all existing schemes of school physics have been based.

Now, although science had made its way into many schools, grammar schools as well as public schools, it was taught almost wholly from books. Here and there teaching was accompanied by lecture demonstrations, and only very infrequently by practical

work done by the boys themselves. The Devonshire Commission, for example, found that out of 128 schools that replied to a questionnaire, only 13 had laboratories and only 18 had apparatus of any kind.

Outside the public schools, the Science and Art Department of the Board of Education greatly extended science teaching by its system of examinations and by grants allocated on the results. The Department also issued excellent syllabuses, including physiography and general experimental science, a course specially adapted to the requirements of rural students. In 1880, the grants were made conditional on the provision of apparatus ; consequently, between 1877 and 1902, over 1,100 school laboratories were built.

Organised Science Teaching

The aided and maintained secondary schools began to come into existence from 1902 onwards, and it is only with these that the teaching of science in secondary schools can be said to have become general. These schools were open to inspection by the Board of Education and by inspectors appointed by the local education authority responsible for their upkeep. Recognition was not granted unless science was included in the curriculum on an equality with other subjects. Practical work by the pupils was made an essential, and a planned four-year course had to be approved.

The greatest change, however, was probably in organisation. In many public schools, terminal promotion, nominally based on general attainment, but really on the necessity for finding room in higher classes for those coming on, had been (and still is) the general rule. Under these conditions a progressive science course without rents and tears was impossible, unless the staffing was sufficiently generous to admit of re-classification for science.

Annual promotions and more intelligent grading were adopted in the new secondary schools and, while the public schools pursued their traditional leisurely course, the new schools set the pace. They soon established themselves on a level of academic attainment, according to the standard set by examinations, equal if not superior to some of the older schools. This they did, not by any forcing methods, but simply in virtue of superior organisation of the course. In so far as a course is not organised it is not science. If it is well organised, the law of organic growth applies ; that is, the more mature the growth, the greater is the rate of growth. In the new schools, pupils began earlier and reached maturity from a School Certificate, Higher Certificate and University Scholarship point of view earlier than in the public schools.

The Curriculum

It has been seen that the choice of subject was, in the beginning, entirely haphazard. Chemistry was first taught because no doubt its introduction seemed easier from the point of view of expense.

Physics requires a greater outlay at the start than chemistry, but is less expensive in upkeep. Worthington, however, showed that it was possible to devise experiments in physics needing only simple, inexpensive apparatus, capable of yielding quantitative results of sufficient accuracy to enable correct deductions to be drawn, and that without over-taxing the patience, the manipulative skill or the intelligence of boys ranging from 14 to 16 years of age.

The recently published Report on the School Certificate Examinations (1932) says that " the subject most commonly taken is chemistry, followed a long way behind by physics (mostly by boys) and botany (mostly by girls)." This, however, is not quite a true representation, because more science subjects are taught in schools than will appear from examination statistics alone.

Table I opposite is compiled from information collected by the Science Masters' Association in 1930. A questionnaire was then sent out to 984 schools and nearly 700 replies were received. There are very few schools teaching chemistry and not physics. Biology is a long way behind. The other sciences include geology and agriculture.

From Table II, in which the number of terms given to each branch up to the time of taking the School Certificate Examination is shown, it is evident that slightly more time is given to physics than to chemistry.

Table III (page 434) shows the percentage number of schools taking the various science subjects prescribed in the different examinations, the average number of *periods* given to theoretical work and the time for practical work in *hours*.

The " Neglect " of Biology

It is not difficult to account for the predominance of chemistry and physics over biology. Biology was first introduced as " nature study " and quickly settled down into what was called " naked-eye " botany. Darwin's *Origin of Species* was published in 1859 and caused a revolution in thought. It also intensified the misguided controversy between science and theology. When the first science master was appointed to teach science at one of the great public schools, he was expressly forbidden by the governing body to teach biology to any but the few senior boys who were destined for the medical profession. The date of that decree is only 1877.

In 1910, the General Medical Council of Great Britain was erroneously supposed to be the only body through whom student-registration for the medical profession could be effected. The Council very rightly demanded a certain standard of general education as a condition of student registration. They went farther, however, and attempted to prescribe exactly what this general education should consist of. The Council, for example, insisted on Latin ; they preferred Euclid to the newer geometry and ex-

TABLE I

SCHOOL COURSES IN SCIENCE, BY EXAMINING BOARDS

	OXFORD AND CAMBRIDGE JOINT BOARD	OXFORD LOCAL	CAMBRIDGE LOCAL	LONDON	NORTHERN UNIVERSITIES	CENTRAL WELSH BOARD	BRISTOL	DURHAM
Number of Schools sending returns	82	125	111	114	142	56	6	14
Number of Schools taking Physics	76	120	108	110	142	50	4	13
Number of Schools taking Chemistry	76	120	109	111	141	55	5	12
Number of Schools taking Biology	28	24	20	21	16	6	1	2
Number of Schools taking other Science	20	47	16	34	42	17	3	2

TABLE II

LENGTH OF SCHOOL COURSES IN SCIENCE, BY EXAMINING BOARDS

AVERAGE NUMBER OF TERMS ALLOTTED TO	OXFORD AND CAMBRIDGE JOINT BOARD	OXFORD LOCAL	CAMBRIDGE LOCAL	LONDON	NORTHERN UNIVERSITIES JOINT BOARD	CENTRAL WELSH BOARD	BRISTOL	DURHAM
Physics	8·14	10·1	9·5	11·6	11·2	9·4	12·7	10·2
Chemistry	7·9	9·5	10·1	10·4	10·3	9·5	10·8	9·6
Biology	2·9	6·9	7·2	6·6	6·1	7·5	6	7·5
Other Science	3·8	7·4	5·4	5·7	5·6	7·5	6	7·5

cluded Elementary Science altogether, arguing that this was part of the professional education of medical students and could only be studied and taught properly in certain vaguely named " scientific institutions " recognised by the Council.

In spite of repeated applications, public schools were refused recognition, and boys who remained at school until they were eighteen were seriously handicapped. They were compelled at the beginning of their medical course actually to repeat expensive courses and delay further advance in order to gain formal certificates of having done again what they had already been better taught at school. It was therefore advantageous in point of time, though not for any other consideration, to leave school at 16 and go to one of these " scientific institutions " recognised by the Council.

TABLE III

EXAMINATION SUBJECTS TAKEN IN SCHOOLS AND TIME ALLOTTED BY EXAMINING BOARDS

1. PERCENTAGE OF SCHOOLS TAKING— 2. AVERAGE NUMBER OF PERIODS PER WEEK FOR THEORETICAL WORK 3. AVERAGE NUMBER OF HOURS PER WEEK FOR PRACTICAL WORK	OXFORD AND CAMBRIDGE JOINT BOARD	OXFORD LOCAL	CAMBRIDGE LOCAL	LONDON	NORTHERN UNIVERSITIES JOINT BOARD	CENTRAL WELSH BOARD	BRISTOL	DURHAM
1. PHYSICS	68·3	73	62	91	91	77	83	78
2. Theoretical	4·1	4·1	4·3	4·4	3·2	5·1	4·2	3·5
3. Practical	1·7	1·7	1·7	1·8	1·6	1·9	1·9	1·6
1. CHEMISTRY	67·1	75	92	91	94	93	100	72
2. Theoretical	4·1	4·2	4·5	4·3	3·9	4·9	4·3	3·7
3. Practical	1·6	1·8	1·8	1·9	1·6	2·0	1·9	1·8
1. PHYSICS with CHEMISTRY	58·5	5	4·5	7	20	1·8	—	29
2. Theoretical	4·9	5·0	4·0	6·0	5·0	—	—	5·5
3. Practical	2·5	1·6	1·7	2·7	2·1	—	—	3·0
1. GENERAL SCIENCE	28·1	21	1·8	7	—	3·6	—	7
2. Theoretical	4·4	4·1	6	6·1	—	4	—	4
3. Practical	1·8	1·8	3	2·3	—	2	—	2·5
1. BIOLOGY	3·7	2·4	1·8	3·5	4·2	1·8	—	7
2. Theoretical	3·9	4	3·5	4·8	3·6	4	—	2
3. Practical	1·4	4	1·7	2·7	1·4	1·8	—	1·5
1. AGRICULTURE	—	2·4	2·7	—	0·8	—	16	—
2. Theoretical	—	5·0	4	—	4	—	2	—
3. Practical	—	2·4	2	—	1	—	1	—

There was a stiff three years' fight before it was discovered that student-registration was not vested solely in the General Medical Council. The powerful licensing bodies, the universities of Oxford, Cambridge and London, and the Conjoint Board of London, then broke away and allowed the first M.B. examination to be taken straight from school. In the end, the General Medical Council gave way, quite handsomely, but not unanimously.

There would be little point in raking up this rapidly ageing controversy but for the fact that the concluding stages were fought out in the pages of *The Times Educational Supplement*, and in the course of it two eminent professors of Glasgow University roundly declared : " Whatever decision may be come to with regard to the physical sciences, we should regard the relegation of the biological sciences to the school period as an unmixed evil, so far as it affects the curriculum for a university degree in medicine." The date of this letter is April 30th, 1911.

" Heresies," to quote Sir Thomas Browne, " perish not with their authors, but like the river *Arethusa*, though they lose their currents in one place, they rise up again in another." Until quite recently, it has been difficult to persuade governing bodies that biology should be a part of general education, and its introduction into schools, except in the form of nature study, has consequently been delayed.

Outside Influences

Science, owing to its recent introduction, has been more subject to outside influences than other parts of the curriculum. There have been several Committees of Enquiry, and the British Association for the Advancement of Science has issued reports from time to time. The inclusion of science on favourable terms in the Army and Civil Service examinations has been beneficial, and in recent times the scholarships offered by the Colonial Office have been a very great help in getting the study of biology introduced, even at the School Certificate stage, on equal terms with chemistry and physics. There is, of course, a great deal to be said for this from a purely educational point of view. When boys come to the stage at which the choice has to be made between the physical sciences on the one hand and biological sciences on the other, they do at least know something of both and are in a better position to make their choice.

The Science Masters' Association

The Association of Public Schools Science Masters was founded in 1901, when a letter was sent out to fifty-seven science masters suggesting a conference. The objects of the Association were clearly defined, namely, to promote the teaching of natural science in public schools ; to afford a means of communication between natural science teachers in public schools themselves and between them and others engaged in teaching natural science elsewhere ; to

afford a means of communication between natural science teachers in public schools and examining bodies. Nothing as yet has been added to this, but in 1919 the Association shortened its title and enlarged its sphere of usefulness by leaving out the term Public Schools and becoming the Science Masters' Association. The membership, however, is still restricted to those actually teaching science in any recognised secondary school, together with a number, not exceeding 10 per cent. of the total membership, of those who in the opinion of the Committee have contributed to the advancement of science teaching in secondary schools. There is a similar Association of Women Science Teachers.

The Report on the Position of Natural Science in the Educational System of Great Britain, published in 1918 (Sir J. J. Thomson, O.M., F.R.S., Chairman), in discussing the training of teachers, says: "As things are, teachers tend to be isolated in their work, especially in the smaller schools. Further, it is difficult for them to keep even tolerably well abreast of the progress of knowledge in a subject in which rapid advances are being made." It is suggested that "it is well worth considering whether some organisation might not undertake the task of issuing a journal . . . or a series of leaflets in which teachers who have devised new lecture or laboratory experiments or new methods of dealing with particular problems in connection with their work might bring them to the notice of their colleagues." As a direct outcome of this, the *School Science Review* was started in 1919 by the Science Masters' Association. The residential annual meetings of the Association, lasting for the greater part of a week in January, were started in 1921. The meetings are held in alternate years in London and in some university. So far there have been meetings in Oxford (twice), Cambridge (twice), Leeds, Birmingham and Bristol (once each). They serve many purposes; they are in a sense true refresher courses, for all the universities named have received the Association most cordially and have taken great pains to show the members what work is being carried on; they open up communication between teachers in schools and universities and they give facilities for the exchange of ideas between school teachers themselves. The teacher in the small country school need not now feel at all isolated or fear that he is dropping behind.

Refresher Courses for Teachers

The Board of Education Short Courses have been found to be most stimulating. They are held at the beginning of the summer holidays and last about a fortnight. At the present time there are courses in chemistry at Oxford, biology at Cambridge, physics at Rugby School and a General Course for Science Teachers at Manchester Grammar School. The courses are open to all teachers in recognised secondary schools, whether the school is in receipt of grants or not, but, unfortunately, the numbers that can be admitted

to these courses are limited and more apply than can be admitted. Travelling expenses in excess of 10*s*. are paid by the Board. Enthusiastic letters from those who have attended one of these courses appear from time to time in the pages of the *School Science Review*. These letters are entirely spontaneous.

Aim and Method

The aims of school education have never been so precisely defined in Great Britain as in other countries. In former times it was understood that preparatory schools prepared for public schools and public schools for the universities. The universities, signifying then mainly Oxford and Cambridge, discovered fit persons to serve, under God, in the high offices of Church and State. No special consideration was given to the remainder ; it was tacitly assumed that those not destined to reach these high offices would receive benefit according to their several abilities. The absurdity of laying foundations on which nothing was afterwards built does not appear to have occurred to any but a few.

Because science was a new subject, struggling to make its way into the curriculum, frequently in the face of passive resistance or even virulent opposition, it was compelled to justify itself. The historical treatment of aim and method should be just as instructive as that of subject-matter, since it is all so comparatively recent.

The first science masters were natural philosophers rather than professional scientists ; they were by force of circumstances student-teachers in the broad sense ; they were brim-full of the enthusiasm characteristic of pioneers. Canon Wilson says : " I never professed omniscience with the boys ; we worked together on a genuine heuristic method ; we had no examinations to check discursiveness."

The sole aim of the first science teachers was to spread knowledge and thereby to arouse the interest of boys in the wonders of the world in which they lived. Specific training in scientific method they did not give ; for that they trusted to example rather than precept, hoping that the faculty of inductive reasoning, together with respect for truth, would be developed as unearned increment when once interest and curiosity had been roused and the imagination stimulated. This is how they prepared to teach botany at Rugby when Dr. Temple wished for the great extension of science teaching. " We set to work at once with immense enthusiasm under Dr. Hooker's advice and worked through the summer term. We spent the summer holidays delightfully at Barmouth, with Professor George Henslow as our tutor, and, with the aid of a party of ladies, made collections and a large series of diagrams for teaching."

The Bristol Trade School experiment was remarkable in a different way. Here practical work in the fullest sense, done by the pupils themselves, was the predominating notion. It is surprising to read now the Headmaster's claim : " I do not think

there is a lad in my class who studies experimental physics who has not made his electrical machine." Something akin to this has been rediscovered in recent years, and the broad principle appeals to an increasing number of science teachers. It is the basis of the Board of Education Short Course at Rugby and of the efforts now being made to establish a suitable course of science in senior schools.

Prof. Worthington considered the problem of doing the best for future specialists and, at the same time, not neglecting the claims of general education. Of his course at Clifton he said: "It is undertaken, like all the scientific teaching, not with a view to training up physicists, but with a view to evoking in the boys a genuine and generous interest in natural phenomena, and of training them to habits of patient and conscientious study. . . . The serious interest thus aroused in a large number is the best guarantee of excellence in the few who may afterwards become specialists."

In time, however, university-trained teachers began to replace the early amateurs. The drift towards specialist training then set in. In 1888, for example, a British Association Committee recommended "that chemistry should be taught in schools, first, and mainly, on account of the mental training it affords; and, secondly, for the sake of its applications and its direct bearing on the facts of everyday life." The facts of everyday life seem to recede a little farther into the background in the following, which was given in evidence before a Consultative Committee on Practical Work in Schools in 1913 (the Right Hon. A. H. Dyke Acland, Chairman). "The chief aim of the science teacher was to use science as a means of inculcating good habits of thought, clear and precise ideas and right reasoning. Incidentally, many useful facts were acquired and interest was aroused in matters of everyday life, both inside and outside the home." The speaker in this case, it may be noted, was the senior science mistress in a large town school for girls.

From about 1888 onwards, training in inductive reasoning by heuristic methods was considered to be the highest aim of school science, though probably only few achieved the stern renunciation of all worldly considerations that the great apostle of the system desired. Most science teachers are humanists at heart and, like Edwards, Dr. Johnson's fellow-collegian, were bound to admit, "I have tried, too, in my time to be a philosopher, but, I don't know how, cheerfulness was always breaking in."

Science regarded as a Special Subject

School science has not even yet completely emerged from the category of special subjects. Two results of this in the past and their consequences in the present must now be considered separately. In the first place, it seemed quite justifiable to leave out science altogether from the scheme of education of large numbers of pupils supposed to have a literary bent. Secondly, teachers of science, acquiescing too readily in this limited view of their subject,

thought that their main duty was to lay a good foundation for a further study of the subject at some place of higher education.

The fact that many otherwise highly educated people have not even a tincture of knowledge of science is evident from the great diffidence shown or feigned by speakers with an exclusive literary training whenever the subject verges on anything scientific. Even Fellows of All Souls halt there and become apologetic. It is also shown by others, not so conscious of dangers ahead, who, either under compulsion or of their own free will, write about things scientific with a totally inadequate foundation.

It may be fairly assumed that writers of news items for the great London daily papers are persons of average education, yet, to take only two examples out of many that could be cited, one of these reported that Prof. Rankine explained to the children in his Royal Institution Lectures that air had no density. A Sunday paper, justly esteemed for its literary pages, said, a day or two after, in reference to Prof. J. B. S. Haldane's physiological experiments on himself: " He even drank hydrochlorate acid, which is so strong that it can dissolve the teeth." Elementary blunders like these are to be found almost daily in the Press. Popular novels, also presumably the work of people of at least average education and read at leisure by educated " readers " before being passed for press, furnish even choicer examples than those given.

However, these are errors in facts which some, regarding science as a special subject, would call technical. Indeed, it does not greatly matter if a Covent Garden salesman does not know if a potato is a stem or a root; or if the golfer who kicks away a toadstool from behind his ball has not even a suspicion that he may be offending under the rule that forbids him to break or bend anything growing. It is much more serious, however, to find that average general education thirty years ago sometimes did not even reach the point of distinguishing between a fact and a theory. Thus we read, again in the daily Press, it is true, that " a wonderful noiseless gun threw a 28-lb. bomb several thousand feet by the use of the energy stored in water, proving that liquids, contrary to accepted theory, are compressible." And again: " He had discovered a new theory and formulated a new method."

To turn now to the second aspect. So long as the principal aim of science teaching appeared to be merely the preliminary training of future specialists, the entire subordination of subject-matter to the inculcation of scientific method did not matter much. Also, if this were the main object, it could be made just as effective in a limited as in a broader field—in heat, light and sound as well as in general physics, in chemistry as well as in biology. From that point of view, the same kind of teaching would do both for future specialists and for general education.

It cannot be questioned that British schools and universities between them have produced brilliant investigators and leaders of world-wide fame in every branch of pure science. If that were all

that was required, there could be no desire for any change. When it comes, however, to a question of what it has done for those who do not become specialists, it is necessary to speak a little more hesitatingly. It was fairly evident all the time throughout the specialist period (though not much notice was taken of the fact) that those who did not go on to higher work were given no real interest in science; they were often repelled by the narrow field and in a few years forgot almost completely the little knowledge that they had acquired. Thus the "old boy," revisiting the scenes of his youth, was thrilled at being once again in the chemical laboratory. "Ah, yes," he would say, "it all comes back to me now. Isn't H_2O the formula of water, and isn't sulphuretted hydrogen the stuff that smells so abominable?" In the face of such apparent oblivion, there seemed little hope that much of the training in scientific method had been carried over.

It is now realised, however, that an educated public opinion is just as essential for the progress of science as is the work of the specialists. The average citizen must have sufficient knowledge of science to appreciate and understand the work of trained scientists, who, as a rule, do not take much pains in pushing their own discoveries. In some cases this does not matter; the potentialities of wireless telegraphy, for example, could be realised without any knowledge of physics. There are, however, some far greater discoveries, mainly in the realm of the life sciences, which will yield no immediate cash return, but which may, in the future, contribute much to the general welfare of mankind. For these the active support of the educated layman is essential. The late Sir Ronald Ross is an outstanding example of one who did not get that support.

But there are even more important considerations than those just mentioned. Though we have now had something like thirty years of extended facilities of general education, it has not yet produced the greatest good of which it is capable; it can hardly be expected to have done so yet. The Headmaster of Harrow (Presidential Address to the Science Masters' Association, December 31st, 1931) looked forward to the time when we shall have formed a society which has learned as individuals the meaning of scientific truth and the nature of fact; when that society shall have learned to reason from facts logically and to suspend judgment if there is not sufficient knowledge upon which to base a logical conclusion; when the spell-binders and slogan manufacturers of modern politics and journalism shall have been put out of commission and humanity freed, so far as it can be freed, from the dangers of mass suggestion. "There are," he concluded, "only two possessions which I wish the average pupil to carry away from this elementary study: the first is, a sense of fact, and the second, a sense of law. It is in these two respects that it seems to me that our modern democratic communities are most deficient, and they are the most important qualities to ensure the continuance of our societies if they are not to work out their own destruction. And I

do not see by what process they can be more readily driven into the mentality of ordinary men and women than by the study of elementary science, if rightly conceived and carried out."

To achieve such an end as this there seems to be no other way than to return to the very sane conclusion of Prof. Worthington, namely, that " the serious interest aroused in a large number is the best guarantee of future excellence in the few who may afterwards become specialists."

The Idea of a General Science Course

From about 1914 onwards there has been a strong movement towards broadening the basis and enlarging the outlook of school science. The views of this section were, in 1921, ably expressed by Mr. Archer Vassall, President of the Science Masters' Association for that year and himself a member of the Association. Reviewing the situation, he said : " There are some who would limit the function of science in schools to one end and one end only, namely, a training in inductive reasoning from experimental data obtained by the pupils themselves. Such would therefore limit the work known as science to experiments performed by the boys themselves, even though, to some temperaments, this work should prove arid and dehumanised." He then goes on to say : " I think this view is much too narrow. I do not believe in training the intelligence by one particular method for one particular faculty, even when that faculty is inductive reasoning. The aims of science teaching in schools are wider than what is connoted by ' inductive reasoning based on experimental data obtained by the boys themselves.' It seems to me that it has one aim in general, namely, the Interpretation of Nature to Youth. In addition to this commonly neglected general aim, it has three aims in particular. First, the inculcation of scientific method and a critical faculty ; second, some knowledge of science and appreciation of its value—for example, of its applications ; third, the stimulation of the imaginative faculty and the æsthetic sense." This is the essence of what is now known as the General Science movement.

No one has yet defined General Science, and some have attempted to give the term a specific significance without much success. General Science is derived from the main body of science, leaving out those parts which seem to be mainly or wholly of academic interest. It is not, however, what is connoted by popular science. It is systematic and, within the limits imposed, it is an organised course of study. Unless it contains parts likely to stretch the brains of the best boys in any class it is bound to fail as a school subject. It is most essential that it should be accompanied by adequate demonstration and practical work done by the pupils themselves ; though it need not include that careful training in laboratory technique which is so essential for those who intend to specialise in science. It is worth while, at this point, to refer back

to Table III. It will be noticed that although there is no practical examination in this subject, an adequate portion of the time allowed is nevertheless given to practical work done by the pupils themselves.

The Idea of an Elementary Science Course

Another movement has lately been started as an outcome of the recent investigation (1932) of the School Certificate Examination. Its motives are clearly set out in the following remark : " It seems quite unsatisfactory that a candidate who passes in chemistry or botany or physics alone should be regarded as having satisfied the conditions in Group III. Schools are under a strong temptation to concentrate unduly on a single one of these subjects, and no single one can by itself afford a satisfactory training in scientific method, or give to a pupil a comprehensive idea of the term *Science*."

All will readily agree that a comprehensive idea of what is connoted by the term science cannot be gained by the study of one small branch. The other remark that a satisfactory training in scientific method cannot be given through one branch alone is open to question. Possibly the investigators have confused scientific method and methods of science.

The proposal is that a syllabus of the elements both of the physical and the biological sciences, with special reference to their application to everyday life, should be worked out. " It might well require," the Report continues, " a knowledge of the work of the great experimental philosophers of the past, e.g. Newton, Priestley, Davy, Faraday, Darwin, and of their contribution to our store of knowledge. It might be expected that children should understand in this way the general methods by which knowledge has been won and the way in which it is applied . . . in social affairs." It is calculated that this might take up about one-eighth of the time of the curriculum, and assuming that, as Sir J. J. Thomson's Committee suggested, a minimum of one-sixth of the time of the curriculum should be given to science in boys' schools, the investigators think that a *qualifying* paper on this syllabus might be set in the School Certificate examinations and that either physics or chemistry or biology might be offered as well at full-subject standard. In girls' schools the recommendation of Sir J. J. Thomson's Committee was that a minimum of one-seventh of the curriculum should be devoted to science. In that case, there would not be much margin for the extra subject.

There are many difficulties in the way. The paper is to be virtually compulsory, and hitherto direct compulsion by examination has not been greatly favoured in English education. A qualifying paper must be very simple indeed ; otherwise a candidate may fail in the qualifying paper and pass in the full paper. This difficulty the investigators foresee. They have left their syllabus to be worked out in detail, and when it is so worked out, it may not differ very much from the Oxford and Cambridge Joint Board

syllabus of General Science on which a Pass with Credit can be obtained. This paper was introduced to meet the requirements of the classical and modern sides of the older schools, where the time allowed for science, particularly if there is a science side, does not reach the minimum suggested by Sir J. J. Thomson's Committee. This paper has been found satisfactory, though possibly the regulations might be revised.

One suggestion that has been made is that the Elementary Science examination shall be conducted by two papers, one being very much simpler than the other. It is suggested that the first shall be a qualifying paper for all who do not offer chemistry, physics, or biology as full subjects, and that the second shall be a paper up to the normal standard of a full subject in Group III.

The Time allotted to Science

This varies a great deal from school to school, and in different parts of the same school if it is large and if the division into classical, modern and science sides is still retained. While in some schools the time allowed is less than the minimum suggested by the Prime Minister's Committee who reported in 1918, in others, where an attempt is made to give a liberal education in which science has a prominent part, the time allowed may be as much as nine or ten periods a week. In these schools, the candidates offer physics, chemistry and biology as full subjects.

The group system in the School Certificate examination has to some extent broken down ; at least, it has been found impracticable to enforce it as rigidly as was originally intended. There are some candidates of good average intelligence and industry who, in spite of all efforts, fail to reach the necessary standard in a modern language, particularly in French. Similarly, there are others who find difficulty in passing in mathematics. A concession has been made in some quarters to those who have no aptitude for the study of a foreign language by allowing them to take lower French, together with an extra subject. A similar concession is now proposed for those who find difficulty with elementary mathematics. It is, of course, stipulated that no candidate should be allowed to exercise both these options in the same examination.

Where there is a science side open to receive those who prefer that subject to modern languages, it is a good plan to adopt German instead of French as the one modern foreign language. Generally speaking, where there is a science side, arrangements are also made for the study of Latin after the School Certificate stage.

Accommodation and Equipment

This may be said to be generally good so far as it goes, but in some cases there is very serious over-crowding, especially in elementary laboratories. This is a source of danger, since minor accidents are almost inevitable and more likely to cause injury in a crowd.

It is a noteworthy fact that actions for damages arising out of accidents in laboratories have been more frequent recently than in former years.

A class of thirty-two boys beginning chemistry requires more supervision than one man can give. There are generally difficulties in the way of dividing the class, and further, this is not very economical. A more generous provision of laboratory assistants would help in many ways.

It has been noticed that where adequate laboratory assistance is not provided, the non-teaching times of the science masters are more numerous than in other schools where laboratory assistants are employed. A well-trained laboratory assistant may save a school a great deal in making and repairing small pieces of apparatus; he also keeps the laboratory benches and furniture from deteriorating, and he may be at call when it is essential that a master should have additional help in supervision.

Advanced Courses

The course in science up to the School Certificate stage is followed by a period of study, covering about two years, during which attention is concentrated on a more limited range of subjects. Sir J. J. Thomson's Committee in 1918 found that the amount of time devoted to subjects other than those in which the pupil was specialising was often extremely limited. They recommended that not more than two-thirds and not less than one-half of the school week should be given to work in special subjects. This recommendation seems to have been pretty generally followed.

Science specialists must now do more mathematics even if they take, as they frequently do, an additional mathematics paper in the School Certificate. As a rule, they do more English, and do it under the best conditions, since the shadow of examination requirements is not so imminent. Provision is generally made for continuing the study of a modern foreign language, or for doing some Latin to meet the requirements of Oxford Responsions or the Cambridge Previous Examination.

There is some danger that the rising standard of Higher Certificate and Scholarship examinations may encroach on the preparation time that a boy can give to subjects other than his special subjects. It is the desire of most science masters that this should be prevented. It is also recognised that in special subjects boys will attempt reading that should more properly come in the university course, and they are more or less encouraged to do this by unsuitable questions in the scholarship examinations.

Schools and Universities

Sir Charles Grant Robertson, in his Presidential Address to the Science Masters' Association (1931), gave it as his considered opinion that we should never get biology duly placed in the curriculum and

the evils of competition for scholarships put right without the continuous and active co-operation of that Association. Also, seeing that only representatives of science can properly determine of what science really ought to consist, and where, when and in what system of allocation the teaching of it ought to begin and be carried on alike in schools and universities, he invited the Science Masters' Association to go direct to the Royal Society and ask that all-powerful body to appoint a small but representative committee to tackle the problem, hear alike the teachers of science in schools and universities and then lay down the fundamentals.

Teachers in schools have not found it easy in the past to get into touch with university teachers, except informally, when it is abundantly evident that there is not only very friendly feeling but also a large measure of agreement about the difficulties that teachers have to contend with on both sides of the dividing line between the school and the university. There was until recently in existence a Consultative Council of School and University Teachers, but it did not receive adequate support from the university side, which was not thoroughly representative. The trouble appears to be mainly the great gulf between the lecturers and demonstrators in universities, who know most about the undergraduates coming to them from the schools, and the University Senate, who have the power of making changes.

G. H. J. ADLAM.

CHAPTER FIVE

MATHEMATICS

Recent Developments

THE present position of secondary-school mathematics can be regarded by teachers of the subject with a certain amount of satisfaction. Mathematics is universally taught, it occupies an important place in the school curriculum, and many long-desired reforms have at last been brought about. For instance, mathematics, in common with other school subjects, has been freed from the disturbing multiplicity of external examinations, strict adherence to Euclid's treatment no longer blights the teaching of geometry, much dead wood has been removed from school arithmetic and algebra, numerical trigonometry is now introduced at an early age in many schools, and the practical rather than the academic point of view dominates the teaching, with a consequent gain in real interest and understanding.

This does not mean that teachers of mathematics can afford to be complacent; far from it. The present must be regarded as a period of consolidation of a hard-won position; schools which have lagged behind must now come into line; the effect of the recent changes must be critically examined and observed weaknesses must be remedied; the simplified nature of the present examination system must not be allowed to hinder further progress; the newer treatment of geometry must not result in loose statement and the neglect of formal thinking; the lightening of arithmetic and algebra must not lead to inaccuracy and the evasion of disciplinary tasks, and numerical trigonometry must do more than supply a ready method of finding the height of a vertical tower on a horizontal plane. Meanwhile, there is ample scope and a real need for further pioneer work: in these days of change the ideas underlying the calculus are of the greatest importance, and means of introducing them to the men and women of to-morrow must somehow be found; the proper division of mechanics between the experiments of the physics laboratory and the mathematics of the classroom, a suitable course in mathematics for those pupils who do not appreciate the ordinary school mathematics, and the relation between secondary-school mathematics and local industries all require investigation.

The General and the Advanced Course

The secondary-school course of to-day consists of two main parts: a general course for pupils under 16, and a specialised course for pupils over 16. The great majority of the pupils leave school on the completion of the general course and take posts in shops, offices and local factories; those who intend to enter a profession take the

specialised course before proceeding to the university or other place of higher education. In practice the syllabuses of the First and Second School Examinations in any subject very largely determine the school syllabus in that subject. If these examination syllabuses are on sound and progressive lines there is no real objection to this ; indeed, they may be of considerable help to many teachers.

In conformity with this general organisation of a secondary school, the mathematics course consists in the main of :

(1) A four- or five-year course in elementary mathematics leading to the First School Examination ;

(2) A further two-year course in more advanced mathematics leading to the Second School Examination.

These two courses will now be discussed in detail.

The Preliminary Five-year Course in Mathematics

Syllabus

The mathematics of the preliminary course embraces arithmetic, algebra, geometry and numerical trigonometry ; mechanics is usually taught in the physics course and will not be dealt with here. With regard to scope, the following scheme is fairly typical :

Arithmetic : Fractions ; metric system ; practice ; percentages ; interest ; stocks and shares ; mensuration of the triangle, prism, circle and cylinder. Recurring decimals and the arithmetical evaluation of cube root are hardly ever taught in secondary schools nowadays.

Algebra : Algebraic operations, factors, fractions, simple equations, quadratic equations, indices, logarithms, ratio, proportion, variation, simultaneous equations, one being linear and one quadratic. The relations between the roots of a quadratic equation, and arithmetic and geometric progressions, are sometimes, but by no means always, included.

Geometry : The geometry of the triangle and rectilinear figures ; area ; the properties of the circle, similar triangles and similar figures.

Numerical Trigonometry : The solution of triangles, with practical applications. There are many schools which even yet do not introduce numerical trigonometry in the middle school. This is partly due to the fact that the subject is not compulsory in the School Certificate Examination, most of the examining bodies including a few questions in the arithmetic paper, these questions being alternative to some of the more difficult questions in arithmetic. Recently it has been suggested that one or two of the questions in numerical trigonometry should be made compulsory.

There are always some pupils who can cover the above minimum course well within the five years, and special arrangements must be made for them ; amongst these brighter pupils there will be future specialists in mathematics in addition to those who will

take mathematics in the specialised two-year course, and they must not be allowed to mark time. The work done by such pupils will be described later.

First School Examination

The important place of mathematics in the school time-table is reflected in the large number of candidates who offer mathematics in the various First School Examinations. In 1931, out of 67,000 candidates, 94 per cent. offered mathematics, the majority of those who evaded the subject being girls. The figures available, by no means complete, suggest that about 60 per cent. of the boys and about 43 per cent. of the girls reach credit standard (the standard required for a matriculation certificate). With the exception of London none of the examining bodies insists on a pass in mathematics, or even in arithmetic, for the award of a certificate, though a pass in mathematics is generally required for a matriculation certificate. The general practice of offering mathematics is no doubt due to the fact that most of the candidates desire a matriculation certificate. It seems to be true that girls have more difficulty than boys in reaching credit standard, but the figures given above do not suggest that girls find mathematics unduly difficult.

Time-table

The usual time allowance for mathematics during this preliminary course is five or six 45-minute periods per week, which is usually spread out as much as possible—" a little and often " applying equally well to lessons in mathematics and the application of lawn fertilisers. In most schools the Head of the Mathematical Department makes out the time-table in his own subject ; he usually draws up form syllabuses so that the work may proceed in an orderly manner. A further subdivision of each year's work into three parts, each part containing a term's work, is also desirable in a large school where there are two or more parallel forms each with its own teacher ; where this is done common examination papers can be set in the school terminal examinations and comparisons between pupils in parallel forms can the more easily be made.

Maladjustment between Elementary- and Secondary-school Methods

First-year entrants to a secondary school are usually between 11 and 12 years of age ; the great majority of these pupils come from local elementary schools, the others from private preparatory schools. With the exception of scholarship holders, intending pupils must take the school entrance examination, which is supposed to weed out those who are not likely to profit by a secondary-school course. This examination consists mainly of arithmetic and English with perhaps a personal interview ; at present there is no uniformity in these entrance examinations and the number of pupils admitted depends on the number of vacancies rather than on the candidates' level of attainment. It soon appears that the standard

of arithmetical teaching varies considerably in the various elementary schools of a particular area, and that only a knowledge of the first four rules of arithmetic, together with the tables of English weights and measures, can be safely assumed. Much time could be saved, both in the secondary school and in the elementary schools which feed it, if arithmetic were taught in such a way that pupils had nothing to unlearn in their first year at the secondary school. The present sharp division between the two types of school is neither necessary nor desirable and an occasional interchange of views would be for the good of both ; the time that could be saved in arithmetic could be usefully spent in geometry.

The Intensive and the Extensive Method

The older method of arranging the mathematics of a school amounted to dividing each textbook into, say, five parts, each part representing a year's work. This method, which is still quite general, might be called the intensive method, and has little to recommend it. In the attempt to cover thoroughly a relatively small amount of ground much time is spent in heavy manipulation ; new ground is broken at infrequent intervals ; the brighter pupils become bored and the weaker ones despair. A newer method, so far as mathematics is concerned, consists in covering a considerable amount of ground in the first year, filling in more detail and breaking new ground wherever possible during the next year, and so on throughout the course. By this method, the extensive or concentric method, the pupil's interest is not allowed to flag, for he is continually meeting new facts, the development of manipulation takes place slowly, and the continual revision entailed produces a most useful feeling of confidence.

First Year

A First-year Course which has proved very successful in practice is detailed below ; there is no separation of the arithmetic, algebra and geometry, and the specially prepared exercises are arranged in such a way that, as the work proceeds, the class is continually glancing back and looking ahead.

First Term : Area of a rectangle (involving English and metric units of length and area), the use of letters and symbols of operation, the construction of a rectangle (introducing the right angle, set square, angles, measurement of angles, protractor, direction, bearings, parallels), fractions (vulgar and decimal, involving not more than two places, and introducing percentages), symbols of operation (brackets, indices, radical sign), simple operations involving fractions, constructions with geometrical instruments, easy equations, volumes of rectangular bodies.

Second Term : The triangle, operations in algebra, models and working drawings, miscellaneous exercises in fractions, polygons, solution of problems by means of simple equations, unitary method, congruence.

Third Term : Proportion (including drawing to scale), ratio (introducing π), the circle and the cylinder, graphs, directed numbers, simple products and factors, the right-angled triangle.

Bifurcation into " Slow Line " and " Quick Line " Courses

At the end of the first year it is found that an appreciable number of pupils are definitely " backward," not only in mathematics but in most of the other school subjects. These backward pupils are usually put into one form which proceeds as a " slow line " on a restricted syllabus. Just what to do with these pupils is one of the problems of the secondary school. Although this unfortunate state of affairs is the concern of the whole school, it is of peculiar interest to the mathematical department, for the entrance examination and the scholarship examination consist largely of arithmetic. It seems that early proficiency in arithmetic and English is no criterion that a particular pupil will make even normal progress in mathematics, science and modern languages. The whole matter of the secondary-school entrance examination needs careful investigation. An increase in the number of subjects, the reliability and inclusion of intelligence tests, and the possibility of transfers from one type of school to another are all likely lines of attack.

There is a growing tendency to organise secondary schools to provide a " quick line " course to School Certificate ; that is, instead of following the normal five-year course, the best pupils cover the ground in four years. A fair proportion of the pupils do this quite easily and then pass on to the specialised course ; in this way they may spend three or even four years on more advanced work before proceeding to the university. The quick line pupils miss one form, usually Form III, and the scheme of work in any subject must make this " jump " possible ; so far as mathematics is concerned, the adoption of the extensive or concentric method mentioned earlier facilitates the drawing up of a scheme of work in a school organised in this way.

The Quick Line

A practical scheme based on these lines is set out below. During the second year (Form II) an attempt is made to cover the greater part of the arithmetic, algebra and geometry of the whole course, the treatment being necessarily slight ; in the third year (Form III) the whole course is covered a second time in more detail than before, some of the more difficult topics being introduced ; by the end of the fourth year (Form IV) all the topics of the course have been considered, and the fifth year (Form V) is spent in revision and the discussion of the more difficult portions of the work. In the detailed scheme shown below the Roman numerals in brackets show the form or forms where the various topics are introduced ; the exercises should be graded so that revision is continually taking place.

Arithmetic : Factors and fractions (II, III, IV) ; proportion,

metric system (II, III); mensuration (II, III, IV); percentages (II, III, IV); interest (II, III, IV); stocks and shares (IV); miscellaneous problems (IV).

Algebra : Graphs (II, III); operations with directed numbers (II, III); Graphs of functions (II, III); simultaneous equations (II, III); problems, using simultaneous equations (II, III); factors (II, III); fractions (II, III); quadratic equations (II, III, IV); problems, using quadratic equations (II, III); multiplication, division and square root (III); indices and logarithms (IV); surds (IV); ratio, proportion and variation (IV); progressions, literal equations (IV).

Geometry : Angles and parallels (II, III); the triangle (II, III, IV); geometrical constructions (II, III, IV); parallelograms (II, III, IV); loci (II, III, IV); area (II, III, IV); right-angled triangle (II, III); extension of Pythagoras' theorem (IV); chords and tangents (II, III, IV); angle properties of the circle (II, III, IV); circle constructions (III, IV); similar triangles (III, IV).

Numerical Trigonometry : Application of sine, cosine and tangent (III); solution of triangles (IV).

It has already been pointed out that the above course represents the minimum amount of work for the preliminary five-year course, and that the brighter pupils can do some further mathematics. In some schools these pupils have followed a course of work leading to Higher Mathematics in the First School Examination, the higher work consisting mainly of calculus and co-ordinate geometry. It now seems to be the considered opinion of experts and teachers alike that the brighter pupils should be encouraged in this higher work, but that they should not be examined in it at this stage ; the papers in Additional Mathematics will probably be abolished in the near future. Where the brighter pupils sit for the School Certificate Examination after four years in the school there is hardly time for this more advanced work, and in some ways it is better that they should get clear of the examination and then set to work on the more advanced mathematics of the specialised course.

This does not mean that the stimulating ideas underlying the calculus should be entirely neglected ; in the writer's school all the pupils in Form IV, with the exception of those on the slow line, devote one lesson per week to Numerical Calculus. This work is the natural extension of the usual graphical work which is now taken in all secondary schools and involves :

(*a*) The measurement of the varying rate of change of a function at a given instant by means of the gradient of the graph of the function ;

(*b*) The measurement of the total change within a given interval due to a varying rate of change by means of the area under the graph of the rate of change.

The pupils now apply these two new tools to the determination of rates of change, maximum and minimum values, approximations, areas and volumes, centre of gravity, pressure on immersed surfaces,

work done by a variable force, etc. This work is very interesting and quite easy, it gives useful practice in drawing graphs, it helps numerical computation, affords practice in the use of mathematical tables (for trigonometric and logarithmic functions can be treated graphically) and is generally of considerable help to the ordinary mathematics of the school. In the next year (Form V) the need for greater accuracy is shown, and formulæ for the derivatives and integrals of ax, bx^2, cx^3, $\frac{d}{x^2}$, $\frac{f}{x^3}$ and simple combinations are developed and then applied to the problems which in the previous year were solved by graphical methods. Work of this nature could be stimulated by including in the algebra paper of the School Certificate Examination two calculus questions which could be alternative to the harder questions in algebra.

The Slow Line

Very little has so far been said about the mathematics of the " slow line " pupils who have no aptitude for the ordinary school mathematics. Attempts have been made to base the mathematics of these pupils on drawing or handwork or both, but not much progress seems to have been made in this direction ; the practical difficulties are many, particularly in mixed schools where cookery for girls takes the place of woodwork or metalwork for boys. These slower pupils usually work through a restricted course on the lines of the normal school course ; the attraction of this to pupils, parents and headmasters is that some of these slower pupils might, and often do, manage in the end to obtain a School Certificate or, in rare cases, a Matriculation Certificate. It seems possible that a mathematical course based on local industries might be more acceptable and immediately useful than this restricted course.

Advanced Course Mathematics

Pupils who wish to continue their studies beyond the School Certificate stage may devote themselves to the further study of a few congenial subjects. Certain related subjects are grouped together, each group forming an Advanced Course ; these courses normally extend over a period of two years and lead to the Second School Examination. This examination is the definite aim of nearly all Advanced Course pupils, for it is largely used as a basis for the award of valuable scholarships. In consequence, the examination syllabus in any subject dominates the school syllabus in that subject.

Many secondary schools now have an Advanced Course in Mathematics and Science, a common grouping of subjects being Pure Mathematics, Physics and Chemistry, or Pure Mathematics, Applied Mathematics and Physics, where only three full subjects are required in the Second School Examination. The mathematics involved may be classed as ***useful*** mathematics, though mathematical special-

ists may take the more formal Mathematics Group; few secondary-school pupils are mathematical specialists, and in these days of large advanced courses such pupils must rely mainly on their own efforts with occasional help from a busy teacher.

The starting-point of an Advanced Course presents little difficulty, for it can be assumed that the pupils have reached credit standard in the School Certificate Examination. Further, the pupils are all about 15 or 16 years of age, of more than average ability and anxious to do their best. For convenience the treatment of Pure Mathematics and Applied Mathematics will here be discussed separately, but successful work in applied mathematics depends on a good working knowledge of pure mathematics, particularly trigonometry, and this must be borne in mind when planning the course. In small schools it is usually necessary to teach first- and second-year students in the same class; this is no great hardship, and the work done by one set of students is often helpful to the other, particularly in applied mathematics.

Pure Mathematics : Syllabus

A typical examination syllabus in pure mathematics is given below:

Algebra : Quadratic functions; partial fractions; binomial theorem for a positive integral index; indices, logarithms; use and computation of simple power series.

Trigonometry : As far as "solution of triangles."

Plane Geometry : Properties of rectilinear figures and of circles, coaxial circles, theorems of Ceva and Menelaus.

Solid Geometry : Properties of straight lines, planes, spheres and polyhedra; mensuration of prisms, pyramids and cylinders.

Analytical Geometry : Straight line, circle, parabola, and central conics, studied by means of rectangular co-ordinates.

Differential and Integral Calculus : Differentiation of algebraic, circular, logarithmic and exponential functions; simple integration; applications to areas and volumes, maxima and minima, tangents and normals, kinematics of rectilinear motion.

With regard to treatment the concentric method is very effective and a course of work based on this method is given below; this is not a mere paper scheme, for it has been in existence for several years and has given consistently good results from every point of view.

First Year

An attempt is made to cover the whole ground in the first year, the work being so arranged that new ideas and methods are introduced as and when required; for instance, radian measure is introduced for the purpose of eliminating the awkward factor in $\frac{d}{dx} \sin x^\circ = \frac{\pi}{180} \cos x^\circ$; the length of the perpendicular from a given point to a given line is required for an alternative expression giving the

area of a triangle with known vertices ; the evaluation of the integral $\int \frac{1}{x}\,dx$ is shown to depend on the value of $Lt_{t \to 0} (1+t)^{\frac{1}{t}}$, which serves as an introduction to " *e*." Much new work should be introduced in the early part of the course, for in this way curiosity is aroused ; if new mathematical tools are forged and used interest is sustained. Little time need be spent on manipulation at this stage, for the main thing is to give the pupils some idea of the range and power of mathematics and to show them how the various topics are related to one another ; this involves a careful planning of the first-year course and the special preparation of exercises suited to it. It is advisable to devote a considerable amount of time to calculus and trigonometry quite early in the course ; in the case of trigonometry, which involves considerable practice in manipulation, it is enough to cover the ground in class and leave the manipulation to private study lessons. The skeleton of such a course is now shown, the work proceeding in the order given.

Graphs : Uses of graphs, significance of varying height and steepness ; functions ; approximate solution of equations to any specified degree of accuracy (introduction of " bracketing "), discontinuous graphs ; circular functions of angles of any magnitude.

Use of algebra in geometry : Equation of a curve, rectangular co-ordinates (mentioning polar, trilinear, areal) ; equation of a straight line through a given point and of given slope, equation of a locus ; length of line joining two given points in terms of co-ordinates of ends, co-ordinates of middle point of line joining two given points ; application to parallelism, perpendicularity, concurrency, collinearity, with special reference to the properties of the triangle.

Derivative of a function : Comparison of steepnesses, measurement of steepness (from graph), gradient, gradient graph ; relation between gradient and rate of change, approximation to rates of change of algebraic, circular, trigonometric, logarithmic functions ; derivative of x^n (n a positive integer), sin x, cos x, tan x ; radian measure ; derivative of sum, difference, product and quotient ; application to rates of change, turning values, approximations, speed, acceleration.

Trigonometric simplification : Expansions of $\sin(A \pm B)$, $\cos(A \pm B)$, $\tan(A \pm B)$, $\sin 2A$, $\cos 2A$, $\tan 2A$; angle between two lines of known gradient, factors of $\sin S \pm \sin T$, etc. ; solution of trigonometrical equations.

Further differentiation : Extension of product formula leading to $\frac{d}{dx} u^n = nu^{n-1} \frac{du}{dx}$; function of a function, differentiation with regard to a new variable, time-rate problems ; implicit differentiation ; indices, differentiation of x^n—all values of n ; maximum and minimum values, points of inflexion, derivatives of higher order than the second.

Integration : Revision of simple mensuration formulæ, areas of rectilinear figures using rectangular co-ordinates, length of perpendicular from a point to a line ; approximate evaluation of areas under graphs (rectangle method, trapezium rule, mid-ordinate rule), series (arithmetic, geometric) with special attention to " sum to infinity," inequalities ; formulæ for area under $y = x$, x^2, x^3, integral notation, formula $\int_a^b x^n\,dx = \left[\frac{x^{n+1}}{n+1}\right]_a^b$, noting that the formula holds for all values of n save $n = -1$.

Logarithms : Investigation of area under $y = \frac{1}{x}$, leading to graphical evaluation of $Lt._{t \to o} (1 + t)^{\frac{1}{t}}$, which is denoted by e, and to formula $\int_a^b \frac{1}{x}\,dx = \left[\log_e x\right]_a^b$; revision of logarithms, logarithmic form (including $\sin\frac{A}{2} = \sqrt{\frac{(s-b)(s-c)}{s(s-a)}}$), solution of triangles, common logarithms, natural logarithms, change of base ; integration the inverse of differentiation, integration formulæ, derivative of the exponential functions, logarithmic differentiation.

Application of integration : Areas, volumes, centre of gravity, work done by a variable force, fluid pressure, speed, acceleration, mean values.

Co-ordinate geometry : Revision, straight line through two points, elimination, revision of similarity, bisector of an angle, loci, intersections of straight line and curve, locus of a point equally distant from a fixed point and a fixed line, change of origin, equation of parabola, locus of a point the sum of whose distances from two fixed points is constant, equation of ellipse, locus of a point the difference of whose distances from two fixed points is constant, equation of hyperbola, geometric properties of parabola, ellipse and hyperbola, asymptotes, tangents and normals, tangent in terms of gradient, locus of mid. points of parallel chords of the conics, parametric co-ordinates.

Series : Convergence of simple series, formation of series from function, expansion of sin x and cos x, McLaurin's method of expansion, binomial series, logarithmic series, evaluation of logarithms, standard series, simple tests of congruency, limits of error in approximate evaluation of series, rapidity of convergence.

Solid geometry : Geometry of planes and lines, solid angles (measurement of) ; area of zone of sphere, mensuration of sphere and cone, trihedral angles, skew lines, tetrahedron, regular solids.

Second Year

During the second year the class goes over the ground again, filling in more detail and spending a considerable amount of time in the working of exercises. The better pupils will cover the above

course without much difficulty and should be encouraged to do some further work in mathematics ; in this connection it is suggested that the methods and results of projective geometry are well worth any time that can be devoted to them. Much can be done in a ninety-minute weekly lecture, attendance at which is optional ; those pupils who attend the first two or three lectures become keenly interested, with a real gain in their general outlook and acquaintance with the properties of the conic.

Applied Mathematics

At the present time applied mathematics occupies a somewhat uncertain position in the Advanced Courses of secondary schools ; this is probably due to the equally uncertain position of mechanics in the middle school, where the subject forms a small but important part of the physics course and is usually taught by the physics teacher. Some of the examining bodies regard pure mathematics and applied mathematics as two distinct subjects ; others include a paper on statics and dynamics in the single-subject mathematics. Of late years applied mathematics has increased in popularity in those schools where a Higher School Certificate can be obtained on three full subjects ; this is due to the improvement which has taken place in the teaching of mathematics, with a consequent liking for the subject in the middle school, and to the prevalent idea that it is easier to reach scholarship standard in pure mathematics, applied mathematics and physics than in, say, pure mathematics, physics and chemistry. Apart from other considerations, however, the combination is excellent both for the future mathematical specialist and for the boy who intends to become an engineer. It is now proposed to discuss the applied mathematics of an Advanced Course in Mathematics and Science when taken as a full subject.

All the students enter the Advanced Course with some knowledge of elementary mechanics ; the mechanics of School Certificate Physics is nowadays based largely on experiment and forms an excellent basis for further work. Given the normal time allowance of eight 40-minute periods per week, it is advisable to devote four of them to statics and hydrostatics and the remaining four to dynamics ; in this way the two branches of the subject can be developed side by side. For convenience, the work in the two branches will be described separately, but in the classroom topics common to both should be grouped together wherever possible.

First Year

Statics and Hydrostatics.—The first year's work begins with the revision of moments, parallel forces and machines ; this is familiar ground, though many students are surprised to find that the efficiency of a machine varies with the load. It is found that problems involving three or more forces acting at a point can be solved only by an appeal to graphical methods ; the need for greater accuracy

now arises, and problems are solved both graphically and by the help of trigonometry, the students choosing their own method in later work. Friction always requires a good deal of attention, for the varying nature of the force, limiting friction, the coefficient of friction and angle of friction are usually quite unfamiliar. A few simple experiments should be carried out in the classroom, but it is desirable to draw attention to some of the results obtained in applied mechanics, for few school textbooks do so. After discussing the nature of weight, usually a very necessary discussion, the various methods of finding the centre of gravity are explained and used; particular attention should be paid to the Σmx method, which is not nearly so well known in the middle school as it should be; this is followed by some graphical work on stresses in frameworks, though not much time need be spent on this rather isolated topic.

Since exercises on the equilibrium of a body involve a greater proficiency in trigonometric manipulation than the students have acquired, it is as well at this stage to do some work in hydrostatics; density, specific gravity, pressure at a given depth, flotation and Boyle's Law are already familiar, though practice in the working of exercises on these topics is very necessary. By the time the students can calculate the thrust on a plane surface and the vertical thrust on a curved surface, and have investigated the depth of the centre of pressure of a rectangle and a triangle, they are in a position to spend a considerable amount of time in working exercises on bodies in equilibrium, which entails the general revision of the first year's work.

Dynamics.—The course begins with the revision of velocity and acceleration; if the students have worked through the course in numerical calculus mentioned earlier in this chapter, much time is saved here, particularly in regard to velocities and accelerations which are not uniform. Newton's laws of motion are usually well understood, though the early and continued use of the relation $\frac{\text{Force}}{\text{weight}} = \frac{\text{acceleration}}{g}$ in the middle-school physics causes a certain amount of difficulty in the proper understanding and application of *Force* = *mass* × *acceleration*. Impulse, work and energy need only revision by means of worked exercises; projectiles, relative velocity, motion in a circle and impact are new topics which, as a rule, do not cause much difficulty.

During this first year a considerable amount of time must be spent on the dynamics of a rigid body which can rotate about a fixed axis. Much confusion is avoided if the idea of the angular velocity of a rotating body is thoroughly understood at the outset; time spent here is time well spent. The parallelism of $s = ut + \frac{1}{2}at^2$ and $\Theta = \Omega t + \frac{1}{2}\dot{w}t^2$, $F = ma$ and $L = Mk^2\dot{w}$, mv and Mk^2w, $\frac{1}{2}mv^2$ and $\frac{1}{2}Mkw^2$ should be clearly shown and a considerable number of suitable exercises worked by the class. The results obtained in the investigation of the compound pendulum and simple

harmonic motion should be verified by simple experiments in the classroom. In this connection it is desirable that some idea of the properties of simple harmonic motion be obtained *before* making use of a point moving with uniform speed in a circle ; the number of students who fail to realise that such circular motion is not necessarily connected with simple harmonic motion is surprising.

Second Year

In the second year of the course the first year's work is revised, extended and systematised. In statics the conditions of equilibrium of a system of coplanar forces require careful attention and are always a source of difficulty ; the various theorems are learnt and arranged in order ; the calculus is used to find positions of stable and unstable equilibrium, and the better students are encouraged to use the method of Virtual Work. The new work in hydrostatics deals mainly with the resultant thrust on a curved surface and the determination of the Centre of Pressure in the more difficult cases. In dynamics the new work is chiefly concerned with the investigation and uses of the Instantaneous Centre, the motion of a body moving in two dimensions, the principles of Conservation of Energy and Conservation of Angular Momentum. The better students should be shown how to form, solve and use the equations $\frac{md^2x}{dt^2} = f(t)$ and $\frac{md^2x}{dt^2} = F(x)$.

L. CROSLAND.

CHAPTER SIX

History and Social Studies

TO Dr. Arnold must probably be given the credit of introducing the study of modern history into the curriculum of the English school. Before his time the more enlightened pedagogue doubtless enlivened the tedium of construing classical authors with discourses on the history and antiquities of Greece and Rome. Indeed, an acquaintance with classical history was, equally with the ability to decorate his conversation with an apt quotation from Horace or Vergil, part of the ordinary equipment of a gentleman. But except for the study of the classical period history has only slowly won its way into the curriculum. Its value as a medium of liberal education has been, and by some still is, questioned. One would not deny that the mass of disconnected dates and snippets which until comparatively recent times almost everywhere supplied the material of instruction had little cultural training value. Nor is it possible to defend that type of history teaching, not yet dead, so brilliantly satirised in *1066 and All That.*

The revolution in the teaching of history, a revolution still going on, is of comparatively recent date. Though for half a century and more there have been here and there in English schools teachers of distinction who have made history a source of inspiration and real cultural training to their pupils, the general spread of enlightened methods of teaching and apt choice of material used is a modern development.

Let us enquire what are the main characteristics of this revolution.

The Revolution in History Teaching

There has been, first of all, a general acknowledgment that at any rate some historical teaching must have a place in the curriculum of schools of all types. Though the amount of time allotted to the subject is still small compared with that given to languages, mathematics and science, its place is now assured.

Enlarged Scope

The scope of the material used has considerably widened. Few, if any, schoolboys can now say that their history teaching ended with the Battle of Waterloo ; still fewer that the only history they did at school was the repeated study of the Tudor Period. Modern history, especially modern European history, is one of the most popular choices for the School Certificate. Courses of purely political history have given place to courses in which social and economic conditions receive at least some attention. In many

schools an outline knowledge of world history is regarded as essential. Even in those schools where English history is the chief study, it is treated not in isolation but in close relation to its European background. Some schools devote a part of the history course to a survey of the history of the locality in which the school is situated. Moreover, the old-fashioned type of textbook has almost disappeared. Publishers vie with each other in issuing a veritable flood of interestingly written, beautifully illustrated manuals to meet the new demands.

Changes in Method

Methods of instruction have also changed. Rarely are so many pages learnt in preparation and the next day " heard " in class. Instead the teacher often learns his lesson and repeats it to his pupils. He knows the price of eggs in the fifteenth century and can describe in detail the meals Queen Elizabeth ate and the clothes she wore when she visited the Earl of Leicester at Kenilworth. He has at his finger ends masses of amusing facts, relevant and irrelevant, to enable him to hold the attention and interest of his pupils. In many schools stimulating individual methods of instruction are used. Boys and girls work in groups at chosen topics, libraries are consulted, charts and illustrated note-books made, lectures on historical subjects are given by members of the class to their companions. Expeditions to cathedrals, castles and other places of historical interest are organised.

The English tradition of freedom in education which encourages each school to develop along its own particular lines and each teacher to work out for himself his own individual method of instruction and choice of material makes it difficult to survey the state of the teaching of history in England with any exactness. But it is probable that nearly every school has been more or less influenced by the revolution which has taken place and that both the material used and the ways in which that material is presented are generally much more stimulating than they were a couple of decades ago.

The extent of this revolution must not, however, be exaggerated. Conditions have been present which have, rightly or wrongly, hindered rapid transition from the old to the new.

Limits of the Revolution : the Influence of Tradition

English teachers, unlike those of America, are on the whole cautious and conservative. They are strongly influenced by tradition, the tradition of the type of education they themselves received at school, of the kind of history they studied at the universities. They tend to base their teaching on what they themselves were taught. New methods worked out by men and women with a zeal for experiment are only slowly and gradually taken up by the majority.

Thus most schools still take as their basis the history of Britain

and the study of British history from the Roman occupation up to the present day fills the greater part of the school course up to the time of the passing of the School Certificate. Some schools do not attempt anything more until after the School Certificate stage.

Though the introduction of a good deal of European history into the English history course and the study of nineteenth-century European history is becoming increasingly common, the serious study of post-war history is comparatively rare.

The study of world history is undoubtedly increasing. Many schools—it is impossible to say whether they are in the majority—include an outline of a sketch of the history of mankind at some stage in the pupils' school course.

While the use of individual methods of instruction is spreading, the traditional way of teaching, a lecture by the master, with or without the taking of notes, sometimes dictated, the reading of a textbook and the testing of the matter studied by the answering of questions either oral or written, is still followed to a greater or lesser degree by the majority of teachers. But many now combine the lecture with a good deal of oral discussion by the class, while visual aids such as maps, pictures and lantern slides are commonly used, especially with junior pupils. Few schools are now without some sort of library, and boys and girls are encouraged to read historical works of a fuller and more scholarly character than their textbooks.

While there is a growing tendency to stress economic and social aspects, to pay less attention to military and naval history, to consider movements rather than reigns, to substitute understanding for the arid learning of genealogies and lists of dates, there still exists, implicitly or explicitly acknowledged, a body of historical knowledge, for the most part political and institutional, which it is assumed that all teachers should teach their pupils. Most teachers accept certain traditional methods of choosing and grouping facts which are a legacy from the history teaching of the past and from which it is difficult to break away. While a good deal has been added, there has been a reluctance to discard, a still greater reluctance to revisualise and reorientate. One single example may be given. How often is the history of the fifteenth century taught mainly as the story of the conflict between great feudal families resulting eventually in the establishment of the Tudor Dynasty on the English throne rather than as the story of a period of social change in which an old world was dying and a new world being born.[1]

The Influence of Examinations

This clinging to traditional methods of instruction and traditional choice and arrangement of material has been encouraged by the British system of examinations and the necessity of preparing

[1] *Vide* report of Miss Dymond's address at the discussion on "The Ideal History Syllabus." (*History*, April 1932.)

the majority of boys and girls in secondary schools for the School Leaving Certificate. While a wide choice of periods to be studied is allowed by the examining bodies, the type of question set by the examiners is such as to tend to direct the teaching of history along more or less traditional lines. That enlightened methods of teaching do not adversely affect examination success—indeed they may definitely improve results—has been demonstrated in those schools which have been courageous enough to experiment. Nevertheless, a fear that the results might be adversely affected has prevented the more timid from departing too much from conventional paths. Examining bodies in England have shown a praiseworthy readiness to co-operate with the teachers in the schools and to adapt their examinations to meet the desires of the teaching profession. Unfortunately, owing to the many conflicting ideals held and methods followed by different teachers, it has as yet been impossible to arrive at any consensus of opinion as to the best means of improving the present type of examination.

Thus, while great changes have taken place in the teaching of history, both tradition and the influence of public examinations have dictated that these changes should be improvements on and adaptations of the old rather than a breaking up of entirely new ground. Such a policy has much to recommend it, but there are signs that many teachers are dissatisfied with the present state of history teaching and are feeling towards fresh conceptions both of method and content.

Doubts as to the Value of History as a Separate Subject

The more vivid and enlightened methods of teaching described above, which have become increasingly common during recent years, can in general be described as attempts to make the teaching of history more interesting and effective and more in accordance with the psychology of the child. Their primary aim has still been the acquisition of knowledge. The teacher of history has tacitly assumed that it is desirable that the child should possess this knowledge. In this respect he is not peculiar, for the teachers of other subjects have assumed the same thing in their own particular departments. The teacher of literature assumes that the child must have some acquaintance with certain authors, the teacher of geography that he must have a certain body of knowledge of the earth's surface. Recently the economist has entered the lists with the demand that a certain body of knowledge of economics should be taught. There are some, however, who have expressed a doubt whether much of this traditional body of knowledge is worth knowing, even if at the end of the school course it can be said to be in the majority of cases in any real sense known ; still more pertinently, whether the teacher's concern is primary with knowledge at all and not rather with the training of the mind in such a way that at the right time, which may not be during his school days, the pupil has the power to acquire expeditiously and

exactly the knowledge he needs and to use it in the most efficient way. To one questioning thus there seems to be in present-day history teaching both a defective aim, in that knowledge is stressed rather than the training of the mind, and a defective content, in that much that is at present taught could without loss be discarded in favour of much that is now omitted.

The Overcrowded Curriculum

Our present curriculum is the result of a continual adding to what was already there. To the old classical-mathematical curriculum, in its way and for its time an excellent training for the right type of pupil, has been added several branches of physical science, one or more foreign languages, the study of English literature, of history and of geography. Enthusiasts insist that biology shall be added to the physics and chemistry course which is the commonest form of science teaching. Economics and civics clamour for a place in school studies. Few would disagree that some form of art and hand-work is desirable for the majority, many would say for all, of the boys and girls in our secondary schools. A far greater attention to the training of the body through games and physical exercises than is at present given is needed. The curriculum, already a patchwork in which much of the old thoroughness has been lost, is in danger of becoming a worse patchwork than ever. It is arguable that the time is more than ripe for an examination and reconstruction of our present curriculum.

Such a reconstruction would involve a number of processes, the determination of what are necessary skills which all must be taught thoroughly ; an examination of what is essential and what unessential in our present curriculum ; of what is necessary for all and what should be studied only by those who have a special aptitude for some particular branch of knowledge ; the overhauling of the knowledge content of the various subjects and the elimination of the unnecessary in favour of what is more valuable ; a rearrangement of present subject divisions so as to ensure a greater economy and a greater unity.

The Idea of a Co-ordinated Course of Social Studies

It is customary in some schools to attempt to co-ordinate subjects which are closely related, but such co-ordination is often loose and spasmodic and is rarely thoroughly worked out. There is thus not only much overlapping between subjects but also the pupil fails to realise the essential unity in the different branches of knowledge he is studying. English, History and Geography have, moreover, enlarged their scope and content, while each has borrowed from the other. The good history teacher realises that he must include a good deal of Geography, the good geography teacher that man's environment is ununderstandable without some reference to his history. Moreover, while

the study of literature usually offers a wider appeal to the emotions than either history or geography, the general mental training given by these three subjects is similar. In each there is a similar training in expression in various forms, each involves similar thought processes. Indeed all are in reality different aspects of the same study, the study of mankind. While in later stages of study it may be desirable to make divisions it is surely undesirable, it is certainly uneconomical, to make such divisions in the ordinary school course. Would it not be possible to regard most branches of what is now called English and the whole of what is now divided up into History, Geography, Economics and Civics as one subject and to teach it as such?

This new correlation would have a twofold object. Through it would be given a training both in the skill of expression, verbal, oral and written, and in various mental processes, such as the collection and handling of facts, the logical arrangement of material, the critical survey and weighing up of evidence, a frank and clear-eyed mode of looking at the world. Through it also would be given a basic body of simple knowledge, capable of being built on later, which would explain man's past and enable the pupil to understand his present. Schools would doubtless make provision for more scholarly, academic study for those for whom such study is suitable and desirable. But the majority of boys and girls in secondary schools neither intend to be, nor are capable of being, scholars. They require training in the art of living, and a part of that training must surely be a *speculum vitae*, however simple, from which they may gain some conception of the unity of man's endeavour and some understanding of his present life and problems.

Problems of Method and Content

In working out the details of this correlation, which for purposes of convenience one may call Social Studies,[1] one must clearly realise its twofold aim—a training of the mind in right modes of thinking and the acquisition of a basic body of essential knowledge. One must consider both method of learning and knowledge-content. One must enquire whether the methods of teaching normally used are the best in training the mental—and one might add, emotional—faculties to function in the most efficient manner possible. One must also decide whether or not the present knowledge-content does indeed give that *speculum vitae* which will enable the pupil both to understand and to live wisely in a rapidly changing world. Such an enquiry demands clear unbiased thinking. One must beware lest one follow the new simply because it is new. Tradition is in part the accumulated wisdom of the past; it must not be lightly discarded. On the other hand, one should not allow a reverence for tradition to prevent one from facing the fact that

[1] The words "Social Science" and "Social Studies" have, however, been recently used with various meanings, some of them different from that in which they are used here.

we appear to be at a critical period in the history of our civilisation and far-reaching changes in methods of education may be necessary to enable our pupils to live happily in a world fundamentally different from that of their forbears.

One must, for the present at any rate, acknowledge the limitations imposed by the School Certificate examination. The examining bodies have shown a readiness to accommodate their syllabuses to the work of the schools. To the schools must, however, fall the task of working out their own scheme of curriculum reform before the examining bodies can be expected to devise a type of examination to suit that reformed curriculum. In Social Studies the limitations the necessity of passing public examinations imposes are, except in the examination year, inconsiderable. Provided the training in the art of expression and in the efficient use of the mental faculties in the pre-Certificate years is sound and thorough, experience has shown that the examinations can be left to take care of themselves.

An Outline of Social Studies

One may start, therefore, with the conception of a scheme of Social Studies which shall have as its object an explanation of the world in which we now live. We shall not confine ourselves, however, merely to what is modern, as is advocated by Dr. Harold Rugg, of Columbia University, New York, and his followers in the United States, for to do so would be to give a false impression of our own age and to deny to our pupils that wide vision which can only be gained when the present is seen in relation to the past. We shall, however, choose our material in a different way from at present, discarding all that which neither explains our own times nor gives enrichment to the mind. A new sense of proportion and standard of values will dictate that much that we have neglected in the past must be included, much that we once taught may be left out.

To attempt to suggest any definite syllabus would be unwise; teachers labouring in different schools would gradually work out a new choice and grouping of facts; but certain broad lines may be indicated. In order that the present may be seen in its right proportions a general picture of the world would be given. One would study the formation of the earth and see how throughout his history man has been influenced by his environment. At the same time one would make a brief survey of human history, noting how men have slowly and laboriously conquered the forces of nature, tried out different methods of government conforming to the different stages of their development, learnt various arts and crafts, improved their means of getting food, developed their methods of transport and communications and so on. This survey would trace, also, the growth of certain key ideas, such as those of political and religious liberty. The great personalities of history would be considered and their work and influence studied. The

story would be brought up to our own day and the growth and character of the conditions under which we live surveyed. Nor would the history, environment and conditions of life of our own land and people be neglected. One would, however, envisage something far different from the slow ploughing through year after year of a mass of standardised facts and theories, of one man in one room teaching the configuration and industries of Yorkshire, of another the misdeeds of King John, of yet another the duties of the Mayor and Corporation. Rather one would look for a unified study of the face and people of England, of her history and institutions in relation to her physical features and economic life, studied, too, not in isolation but in relation to her international environment. Side by side with this might be read the literature which illuminates England, for example, Hudson and Jefferies, Shakespeare and Kipling and the lovely essays of C. E. Montague; and if this study should at times become lyrical it will be all the better for that. One does not desire in one's pupils a cold and crude internationalism; rather one would encourage love of one's own native land combined with understanding of and sympathy with other peoples.

With such a basis one may proceed to a definite survey of the problems and conditions of the modern world. There more than anywhere else it will be found that the present subject divisions automatically disappear. Nearly every modern problem has aspects which are at the same time geographical, historical and economic, none of which can be avoided if a clear understanding is to be gained. One would survey political and economic problems throughout the world and discover how they have arisen. One would consider how different parts of the world are governed, how people make, sell and buy goods, the changed conditions of life due to scientific discovery, the development of machines and improved transport and communications. Nor need one confine oneself to the more obvious problems of our age. If a full survey is to be given such modern manifestations as the press, the cinema, advertisements, the radio and town and regional planning must receive attention. Particularly out of these latter studies could arise some examination of good taste, of beauty in literature and art and architecture and so on to the study of rightness in both verse and prose.

Such unified studies, thoroughly taught, would, one believes, be not only a far more liberal education to those who are not destined to be scholars but would also give a more effective groundwork to those who may later proceed to more advanced work than the patchwork of disconnected subjects which make up our present curriculum.

The Teaching of the New Course

The chief difficulty would be to find the teachers, not so much with the requisite knowledge, for any normally competent teacher

could work up sufficient material at any rate to make a beginning, as with the necessary keenness and insight to break away from conventional groupings and sufficient vision to carry out the process of unification.

Of methods of work little need be said. Much more experimental work has been done in the best ways of teaching than in the most suitable things to teach. One would hesitate to say that one method was good, another bad. Certain general principles may, however, be stated. It is useless to expect boys or girls to think clearly if they are never given an opportunity to think, it is useless to expect them to be able to collect, weigh and arrange material logically if they are never given a fair opportunity to do so. The apparent excellence of a piece of written work done by a pupil after an exposition by a competent teacher may be a sign rather of the clarity of the teacher's than of the pupil's mind, while the somewhat muddled effort of one who has dug out his facts for himself may be in reality a much more valuable performance. One envisages the Social Studies classroom of the future rather as a workshop than as a lecture room, in which oral exposition will have its due place but in which the pupil will do more and the teacher less, in which what the pupil is becoming is regarded as more important than what at the moment he knows. Experience seems to indicate that knowledge, perhaps more slowly acquired, but better digested and more permanent, will not finally be lacking.

Conclusion

I have tried to describe what is, I have attempted to show what might be. It may be said that I am actually pleading for the virtual abolition of the teaching of history as such. To some extent this is true. As a headmaster, whose task it is to co-ordinate the whole of the teaching of the school I control, I have been impressed by two things: the overcrowded character and the overlapping of our present curriculum organisation, with a consequent lack of thoroughness and waste of energy, and the unsuitability of much of it for the ordinary boy as a training for entering a rapidly changing world. Only by a reorganisation and unification much more far-reaching than has as yet been attempted can, I feel, an education suitable to modern needs be attained. There will still be room in our schools for the specialist historian engaged on advanced historical work, though even here a greater co-ordination may be desirable.[1]

[1] For instance, one would like to see a paper in the Higher Certificate examination on " Western Civilisation " which would include modern history, geography and economics. It is interesting to note the great importance attached in History Scholarships at the older Universities to the General Paper which is sometimes given greater weight than the actual history papers themselves. The General Paper is, in a more advanced form, virtually a paper in what I have called Social Studies.

Education must be regarded not as a patchwork of " subject knowledge " but as a training of the whole man. Only in so far as each branch of it contributes to that training is it worthy of retention in the curriculum. On that criterion it must stand or fall.

F. C. HAPPOLD.

BIBLIOGRAPHY

The Teaching of History. Board of Education Pamphlets, No. 37. 1929. (H.M. Stationery Office.)

Memorandum on the Teaching of History. Association of Assistant Masters in Secondary Schools, 1926. (Cambridge University Press.)

Clarke, F.: *Foundations of History Teaching*, 1929. (Oxford University Press.)

Happold, F. C.: *The Approach to History*, 1928. (Christophers.)

Hasluck, E. L.: *The Teaching of History*, 1920. (Cambridge University Press.)

Jarvis, C. H.: *The Teaching of History*, 1917. (Oxford University Press.)

Madeley, H. M.: *History as a School of Citizenship*, 1920. (Oxford University Press.)

Hoyland, J. S.: *Faith and History*, 1926. (Student Christian Movement.)

Stevinson, E.: *Handwork and Social History*, 1916. (Oxford University Press.)

The Education of the Adolescent, pages 195–203: Board of Education Report, 1926. (H.M.'s Stationery Office.)

Consitt, E.: *The Value of Films in History Teaching*, 1931. (Historical Association.)

The School Certificate Examination, pages 79–88. Report of Board of Investigation, 1932. (H.M.'s Stationery Office.)

Summary of Replies of 560 *Teachers of History in Secondary Schools*, 1932. (Historical Association.)

Madeley, H. M.: *Time Charts.* (Historical Association.)

Articles in *History*, Journal of the Historical Association, notably:

1. Descriptive articles on the teaching of history in certain schools: Berkhamsted (January 1921); Bedales (July 1931); Sherborne (October 1923); Oundle (October 1925); The Secondary School, Bedlington (July and October 1931); The Royal Military Academy, Woolwich (April 1933).

2. The Ideal History Syllabus, a discussion reported by C. H. K. Marten (April 1932).

3. Reports on the Salisbury Experiment in the Technique of History Examinations, by F. C. Happold: A New Type of Question in History Papers (July 1928), followed by a pamphlet issued by Council to members, entitled, " The Case for Experiment in the setting of papers in the First Schools Examination "; Report on the first experiment in July 1931 (January 1932); Report on the second experiment in July 1932 (January 1933).

The New Era. Special number on the Teaching of History, April 1930, and articles by F. C. Happold on The Changing Curriculum: Social Studies: April, May and June 1933.

CHAPTER SEVEN

GEOGRAPHY

The Present Position[1]

FORTY years ago, geography was "the Cinderella of the curriculum"; to-day it has advanced, like experimental science, to something like parity with the four great staples of school instruction—classics, mathematics, modern languages and history. It has ceased to be a matter of capes and bays, counties and capitals, or even a tag to history (as in the syllabuses of the eighteen-nineties). Once a subject reserved for the dull boy and girl, and taught in a way calculated to make them dull, it is now a vital element in the instruction of all pupils up to the age of 14 and is taken, further, by two out of every three pupils who proceed to the School Certificate examinations. It can hardly be claimed that 66 per cent. of our pupils are backward and dull. Moreover, dull pupils are not so plentiful as we once thought; once turn them on to subjects which make appeal to their special gifts and tastes—like nature study, handwork, scouting, art, music and applied science—and they often prove their ability to rank with other pupils of more academic type who are clever in literary subjects but have little practical capacity.

Even more than two-thirds of secondary-school pupils would continue their geographical studies beyond 14 if geography were given an equal chance with other subjects in qualifying for Open Scholarships at the universities. It is already taken to an advanced stage by many who compete for State Scholarships through the Higher Certificate examinations.

The day has passed when heads of schools could turn on any member of their staff with a few blank "periods" to be filled to teach geography. To-day geography is as live and valuable as any subject in the school curriculum. Since 1890 it has steadily developed a technique of its own and become a unified subject with its own "frame of reference." It has thereby grown in esteem, and anyone fully acquainted with its modern content and mode of presentation must feel some surprise that the Examinations Council refuses to allow it to stand on an equality with other subjects in Group III of the School Certificate syllabus (mathematics and science), whilst hygiene and agricultural science (quite rightly) are allowed to do so. This creates an undeserved "inferiority complex" for our subject. In this connection it is interesting to note that the Panel of Investigators say in their recent report that "the Pass and Credit standards in geography are at least equal to the average in other principal subjects" and "a more exacting standard

[1] See Report of Panel of Investigators: "The School Certificate Examination" (H.M. Stationery Office).

for Distinction in geography is required in most of the examinations " (page 95).

Many converging factors have brought geography to its present position :

(*a*) Dr. Scott Keltie's report to the Royal Geographical Society in 1885.

(*b*) The foundation of " Schools " of Geography at all the universities (beginning with Oxford), leading to Honours Degrees worthy to rank with those of any other " School " or " Tripos," paved the way. University leaders, moreover, have enriched the subject from many angles and helped to define its limits and possibilities.

(*c*) The enormous development of municipal and county secondary schools, together with the reorganisation of the endowed grammar schools, which followed quickly upon the Education Act of 1902, led to many new experiments in the direction of balancing humane and scientific studies in the curriculum. Geography, affording the chief link between the two sides, came into its rightful place. The universities set themselves to provide the necessary teachers, qualified by special training in a combination of studies to lead the way in a new presentation of the subject. The new schools are recruited largely from the primary schools, and 90 per cent. of their pupils look, not to a university course at 18, but to business and industry at 16 *plus*. It is clear that geography can be an important element in training these for everyday life and for citizenship.[1]

(*d*) Later, the Great War drew attention to the perils of ignorance of geography ; it created eager interest in maps, pictures, peoples of other lands, the economic interdependence of nations and the vital importance of food-supplies and trade routes. The peace of 1919 ushered in a new world, for an understanding of which geography is one of the first essentials.

(*e*) From that year onward university lecturers, Board of Education inspectors and secondary-school teachers have laboured together incessantly to work out a syllabus requiring sound effort and wise treatment, yet within the grasp of pupils of secondary-school age. They have recognised the synthetic character of the subject—its combination of the scientific study of the natural environment with a due attention to the varied human response to it.

Examinations are now conducted by eight examining Boards. Four of these, representing 57 per cent. of all candidates for the School Certificate, place geography in both Groups I and III, recognising its twofold nature ; three place it in Group I and one in Group III. The great majority of geography teachers feel it is desirable that this discrepancy should be ended and geography placed by all (as it is by a majority) in both groups, frankly acknowledging its special character.

[1] See Barker's *Geography and Citizenship* (University of London Press).

In the Higher Certificate syllabuses, geography can be taken in either Group II (chiefly English subjects and modern languages) or in Group III (mathematics and science). For those fortunate pupils who can remain in the Advanced Courses and proceed to the Higher examination, geography can offer fruitful lines of study—interesting, comprehensive and disciplinary in the best sense. The comparative lack of Open Scholarships acts as a deterrent, but the post-war development of university degrees in Economics, together with growing recognition of the value of geography by the big business houses, is leading more and more pupils to pursue the subject at this Sixth Form level. Many schools are now taking up the subject with the same zest and thoroughness that are given to classical and other long-established studies.

The Scope of School Geography (Ages 11–16) [1]

The co-ordination of the syllabuses of the eight Examining Boards by the Central Examinations Council has now brought virtual agreement as to the scope of School Geography. By the help of the Royal Geographical Society, the British Association for the Advancement of Science and the Geographical Association (a body of 4,000 teachers of the subject drawn from every type of school and college and including all the recognised leaders in the subject), methods and aims, content and outlook have been so thoroughly canvassed that agreement is as complete and enlightened as on any subject in the curriculum. The day of experiment has given way to the hour of common advance towards a recognised goal. We say "advance" advisedly, for the moment a subject becomes stereotyped and static its value as an educational instrument is lost.

A good syllabus has reacted on the teaching in the schools and set up a satisfactory standard of unified knowledge to be attained. Every one of the eight School Certificate syllabuses demands :

(1) A knowledge of the fundamental principles of geography.

(2) A thorough and practical study of the *Home District* and the larger *Region* in which the Home District is included, with full use of the Ordnance Survey maps.

(3) A reasonably full acquaintance with the geography of *The British Isles.*

(4) An elementary knowledge of *The World in Outline.* (Some syllabuses also specify a region to be dealt with in greater detail.[2])

Let us expand these headings.[3]

[1] See *The Scope of School Geography*, by Rudmose Brown and others (Oxford University Press).

[2] Many teachers feel that this overloads the syllabus.

[3] In this section I am partly drawing upon a scheme worked out by Mr. T. C. Warrington and myself at the request of the Incorporated Association of Headmasters. It was later published in *Geography*, March 1930.

The Principles of Geography

It is very important that pupils should acquire clear notions of the geographical terms they use and a sound grasp of the underlying principles of geography. These principles should be introduced incidentally in junior classes, as they are needed to elucidate the lesson and only so far as they can be grasped by the pupils, much in the same way as small doses of grammar are administered in the language lessons when necessity arises. Many of the principles of geography can be arrived at in a concrete way in the course of studies of the home region. At the School Certificate stage these geographical principles can be gathered up into an elementary *corpus* of living scientific knowledge based on world-studies, and in the process afford a genuine training in the beginnings of scientific method. The study of day and night and the revolving seasons, of land-forms and the cycle of erosion, of climatic types and vegetational zones, can be made as truly scientific as a study of the Milky Way, investigations into latent heat, or the unravelling of the life-history of a butterfly, and can yield results at least as vital for human well-being.

The Home Region

The study of the Home District and the larger Home Region of which it forms a part, in all their aspects (physical, climatic, historical and economic), through actual contact and observation, equipped with old maps and ordnance maps, geological hammer and camera, is the only real way of learning the meaning of geographical terms and building up " a fund of concrete experience which will help the pupil to reconstruct in imagination the life and scenery of lands not visited." In this way pupils learn to " see solid " and to read through the map to the realities behind. By it pupils acquire concrete standards for comparison—a mile, an acre, a square mile, 10 miles ; 100 ft., 500 ft., 1,000 ft. altitude ; 30°, 50°, 70° Fahrenheit ; and so on. The method develops the spirit of research, trains the power of selecting facts and yields first ideas of what is fundamental in geography—the fact that a " region " is a unity built up of diversity. The pupil realises that the parts of his Home Region have each something to contribute to the whole and something to gain by living contact with it. He learns the meaning of a focal capital with its wealth of associations, and discovers why it is placed where it is and through what historical stages it has grown to be what it is. This is " geography by discovery " and can yield its appropriate thrill. Every fact is mapped and so a sense of location is developed. The pupils are engaged in preparing a " new Domesday Book " and, with the universities as clearing-houses, the local records of each region could be co-ordinated into one " grand inquest " of the *Homeland*. Witness the work of the Land Utilisation Survey, taken up by schools of every type and pieced together into one living garment by the experts of the Survey. The issue of their maps on the convenient scale of one inch to the mile is now

in progress. The study of local weather in relation to official Weather Charts and in comparison with the daily " wireless " forecasts, which the pupils can put to the test, is the best possible introduction to ideas of climate.

The Home Region is a microcosm of the greater world. Thus thoroughly studied, it acquires a " personality " and can stir emotion. Such work provides a sound foundation for civic pride and can create a desire for town improvement and the preservation of the countryside.

The British Isles

Concurrently with the study of the Home Region, the pupil can be introduced to neighbouring and more remote home regions within the British Isles, some having a family likeness to his own and others affording striking contrasts, *e.g.* Wales and East Anglia, the Lake District and the Fens, the Black Country and the Cornish Peninsula. The pupil gradually realises that our islands are made up of some twenty to thirty home regions, each with its focal town, each a unity in itself, yet each a part of the greater diversified whole.

Some teachers prefer to arrive at the idea of " natural regions " by way of an introductory study of the British Isles as a whole in their physical and climatic aspects, then proceeding to consider the regions in detail, beginning naturally with the home region. This is sound procedure in the middle school, where the pupils are in a position to grasp the principles underlying the classification. Whichever method is used, the parts and the whole, the whole and its parts, must be welded into a unity.[1]

At later stages in the school course, the British Isles will be considered as forming one of the " major natural regions " of Europe and, finally, they will be studied in their world-setting, with all the implications of position, climate, resources and world connections.

Having viewed the *Homeland* in three such widening circles, the pupil is ready to view the problems affecting his own country in truer perspective and with wiser understanding.

The World in Outline

All geographers are now agreed that school studies must include a knowledge of *The World in Outline*. It is not enough that some countries should be studied for their importance (and others neglected), for even the great countries must be set in their world framework to be properly understood. The World is the home of man and the culminating unity of which " home regions " and " major natural regions " are lesser unities.

(*a*) The fruitful idea of " major natural regions " (due to the late Professor Herbertson) is approached by a study of similarities and contrasts in zones, climates and vegetation-types over the whole globe.[2] The method of enquiry is genuinely scientific, since it

[1] See Fawcett's *The Provinces of England* (Williams & Norgate).

[2] As in Unstead and Taylor's *General and Regional Geography* (Philip).

proceeds by way of the collection and analysis of facts, classification and elementary synthesis to a synoptic view of the World as the environment of man.

(*b*) Then each region is taken in turn and the human response to its economic possibilities is noted; some are "regions of difficulty," where obstacles to human progress are formidable; others are "regions of increment" where life is too easy to induce foresight, expenditure of energy and economic conquest; whilst still others are "regions of effort," stimulating man to tackle problems and rewarding him as he develops energy and foresight and adopts new methods based on scientific research.[1]

(*c*) When the regions of the world have thus been seen in perspective and in all their diversity, the pupils are ready to grasp how, on the world scale as well as in the smaller worlds of home region and homeland, "things hang together." They will realise that the skeleton of Scientific Geography always needs to be clothed-upon with the flesh and blood of Human Geography.

Naturally, more time will be devoted to the vitally important regions than to desert places or lands of ice and snow. More attention will be given to seasonal variations of temperature than to annual averages, to the seasonal distribution of rainfall than to the annual total. Growing and resting periods in vegetational life and the optimum conditions for the production of staple plant resources (e.g. wheat, cotton) will be carefully noted. But natural regions seldom coincide with political divisions; there is overlapping. It is important, therefore, at the School Certificate stage, to consider political frontiers in relation to relief and regional limits. Large countries may include more than one natural region and large regions may be shared by more than one State. Highly developed countries, like Germany, France and the United States, should be carefully examined from this point of view, since it will help to explain not a few of their economic and political problems.[2]

It will be readily seen that with such a programme there will be a tendency to "overload the ship," [3] and a danger of confusing the pupil's mind and destroying interest. That is why the syllabus specifies "the World *in Outline*." In the midst of such wealth of material, it is difficult to keep a sense of proportion. One outstanding danger is that pupils acquire only an imperfect grasp of location. This can be overcome by constant use of blank maps of many types on which the pupils insert every place dealt with in the lessons. Lack of topographical knowledge is as disabling here as a lack of facility with the multiplication table is in other subjects. In last year's YEAR BOOK OF EDUCATION, Mr. H. V. Usill pointed out the danger of so humanising our subject that there is little geography left. This real danger can be avoided by pinning down the pupils to the facts which are the raw material of geography; they can then

[1] This useful classification is due to Prof. Fleure.
[2] See Isaiah Bowman's *The New World* (Harrap).
[3] It should be noted, however, that the course is spread over five years.

be set to work up the material in the attractive and fruitful way the modern human outlook suggests.

Presentation of the Subject (Ages 11–16) [1]

Having discussed the content of school geography, we next ask what principles should guide the teacher in the presentation of the subject to his pupils. A new outlook involves a new approach. The syllabus is logical; a teaching scheme must be psychological. Junior classes, intermediate forms and advanced pupils must be led to view the subject in ways suited to their stage of mental development. At every stage a minimum of three periods a week, of 40 minutes each, is needed to treat the subject adequately.

The Special Room

A special geography-room is a *sine qua non* if the best results are to be obtained. It gives the right atmosphere and creates respect for the subject; it stimulates the spirit of research and enables the teacher to make full use over an extended period of the wall maps, display charts, diagrams, pictures and models which are so vital to a series of connected lessons. In these days of sound-films and broadcast lessons a geography-room is more essential than ever. Lantern, globes, epidiascope, ciné-projector, screens and all the accessories of a modern geographical outfit cannot be readily moved from room to room and would be liable to suffer damage in the transit. Furthermore, a library of reference books, records of travel, atlases of many types, and current standard magazines (especially for Sixth Form work), as well as apparatus for observations on the sun (demanding a south window) and the indispensable provision of a simple Weather Station, all point to the need of special provision for geography teaching, if justice is to be done to the subject.

Such provision is designed to secure a feeling of reality and develop a sense of perspective—two prime necessities of geography teaching, neither of which is easily attained. The lantern has still its important uses; the epidiascope has now become a valuable aid to "reality." The silent film has great possibilities, and schools eagerly welcome the establishment of a Film Institute [2] from which educational films can be hired (or purchased) as lantern slides are now. Small country schools could be served by travelling projectors. A Visual Instruction Service of this kind would prove a great boon. It is important, however, that the films supplied should be teaching-films prepared by experts who know exactly what is wanted. They should be graded in difficulty, regionally classified and interspersed with abundant sketch maps. The present generation, we have been told, is "cinema-minded," so the classroom film must not fall behind in technical quality those shown at the

[1] See *Geography in School*, by Fairgrieve (University of London Press).
[2] See *The Film in National Life*, Chapter V (George Allen & Unwin).

local picture-house. A series of carefully chosen films could bring the world into the classroom and do much to make geography real. Experiments show that backward pupils benefit greatly by film instruction when it is backed by sound teaching. The sound-film and television are not yet school propositions, but may easily become such within the next ten years.

And now " wireless " has come to the modern teacher's aid. A scheme of lessons on a given continent or region is broadcast weekly. Pupils studying that region can profit considerably by listening-in, with their atlases and picture-synopses before them. The lecturer knows the country intimately and so gives the feeling of reality to his talk. The class-teacher can prepare a sketch map on the blackboard and fill it in as the lesson proceeds. This the pupils can follow with their eyes whilst they lend the speaker their ears. The problem at present is that only one continent is dealt with in any given term. Time-table difficulties arise unless the whole school takes afternoon " preparation," in which case the whole or any part of the school could follow the talk in the Large Hall. In the hands of a traveller who is also a born teacher (which is often the case) excellent results can be got. The lesson is doubly valuable if it is preceded by a ten-minutes introduction and supplemented by a ten-minutes recapitulation, with a map to gather up the facts. Indeed, this is really necessary, since not all the aspects of the geography of the region dealt with can be covered by the lecturer.

Given all these wonderful aids to modern instruction,[1] the teacher remains himself as necessary as ever. He brings the personal touch, the living stimulus of question and answer and the gift of adaptation to his pupils' needs, which are the life-blood of good teaching. And in spite of salutary warnings, there is still something to be said for the method of " chalk and talk " if the talk is clear, relevant and alive and the chalk is cleverly used in mapbuilding and the making of synthetic diagrams. Films and wireless, good as they are, remain accessory and fragmentary. The comprehensive study of a region is the work of the teacher.

Junior Classes (Ages 11–13)

In junior classes, where pupils have not gone far in mathematics or elementary science, Descriptive Geography—accurate, vivid, real—is of paramount importance. Pupils' memories are very retentive at this stage, and rich detail creates interest where the dry bones of the subject would breed dullness and inattention. The detail must be welded into a unity and description should be accompanied at every step by simple maps which " fix " the places and facts in their space-relations. Children learn and retain facts more firmly by " eye-gate " than by " ear-gate," and so lessons should be well illustrated by maps, diagrams and relevant pictures.

[1] See Section V, YEAR BOOK OF EDUCATION, 1933.

Easy extracts from travellers' records help the sense of reality and create confidence. At every stage the World is our canvas. Simpler communities should be studied in earlier lessons, more complex communities left till later stages. Junior pupils can do quite a lot in the way of Home Geography. It appeals to them, because it is " learning by doing " ; they must, of course, think about what they do. They can observe hills and valleys, rocks and relief, soils and crops, land utilisation, the local river and the town or village site. An elementary study of " common things " and their place of origin can be made to link up the home region with very different regions in the outside world and bring out first ideas of the way in which the peoples of the world are bound together. Such lessons need not be haphazard—the teacher can keep a clearly defined scheme at the back of his mind.

Intermediate Forms (*Ages* 14–16)

In the intermediate forms pupils are beginning to prepare for the School Certificate examination and it gives them a feeling of " growing up." They have by this time acquired a sufficient knowledge of mathematics and science to be able to grasp the more elementary principles of geography. The study of these principles can afford a sound training in scientific method ; the treatment must, however, be really scientific and not pseudo-science ; it will then stimulate interest and beget confidence. The power of selecting relevant facts can be trained.

So much for the scientific aspect of our subject ; now let us turn to the human aspect. How the peoples of the world have reacted to the varying conditions of relief, soil, climate and vegetation which form their environment is equally a part of our subject—many would say the more important part. The elementary needs of man are food, clothing and shelter ; how they are met is an essential question which geography attempts to answer. Different regions develop characteristic types of community. Regions are not self-sufficing, and so interchange of goods, mingling of peoples and pooling of ideas all spring out of a rich variety of geographical environment.

The pupils at this stage can be brought to see that the geography of each region is twofold, (*a*) physical and climatic, (*b*) economic and human, and that it is only properly grasped when the two aspects are held together as a living unity in the pupil's mind.

Economic Geography,[1] based on well-chosen statistics, appeals to pupils at this stage, just as picturesque descriptions of widely differing peoples and modes of life do to junior classes. The statistics must be converted into comparative graphical diagrams to yield their full value ; in many cases they must be reduced to percentages if they are not to prove unwieldy. As the pupils pass from one continent to another they can observe how regions of

[1] See Chisholm's *Handbook of Commercial Geography*, ed. Stamp (Longmans, Green).

similar climatic type differ in their stage of development according as the people have retained primitive methods of life or have adopted the inventions and ideas of modern science. No two major natural regions of the same type are identical in relief or in climatic detail, and the search for reasons is both fascinating and educationally valuable. Incidentally, it serves to point a warning against hasty generalisations. *Political Geography* must receive reasonable attention at this stage. For this purpose maps showing frontiers by bold red lines on an orographical background should be used.

In the final year of the School Certificate stage an elementary synthesis of the World in Outline in all its varied aspects should be attempted, and stress laid on the interdependence of nations and on the links of transport.

Seventy per cent. of our secondary-school pupils leave at the end of this stage and such a synthesis should prove a not unworthy preparation for tackling the hundred and one problems they will meet in business, in politics and in their daily newspapers. They should have learned not to swallow all they read, but rather to base their judgments on well-founded study of the questions that arise.

Sixth Form Geography (Ages 17–18)

For those fortunate pupils who can stay on for Advanced Courses, geography can offer lines of study second to none among the subjects included in the Higher Certificate syllabuses. Such courses offer scope for research, for essay-work, for the study of original sources and official statistics, for the discussion of vital problems and the training of sound judgment. Think of the fascinating problems presented by such urgent questions as the development of irrigation, labour supply for the exploitation of the resources of the tropics, the future of cold-storage transport, the use of hydro-electric power, the application of science to agriculture, the relation between desiccation and migrations, " the overflowing bowl of China " and the policy of a " White Australia," the Polish Corridor, and a score of other equally vital problems resting on a geographical basis. In this connection economic geography is of first-rate importance. The close connection between geography and history is also brought out clearly. Every historian needs to be something of a geographer, and no teacher of geography can afford to neglect the study of history, especially in its social aspects.[1] Consider, for example, the importance of natural routes along which have passed immemorial trade, challenging armies, migrating hordes, crusaders and missionaries, heralds of culture and pioneers of empire : (say) the Khyber Pass, " the Fertile Crescent," the Dardanelles, the Brenner Pass, the Rhône Corridor and the wet ways of the narrow seas.

[1] Cf. Fleure's *Human Geography in Western Europe* (Williams & Norgate), and Thompson's *Historical Geography of Europe* (Oxford University Press).

The syllabus at this advanced stage affords plenty of material for the students to get their teeth into, and offers opportunity for intensive study demanding patient research and the mental discipline of genuine scientific method. In addition to world study based on well-grounded principles, it is usual at this stage to concentrate on two widely contrasted regions, in the study of which those principles can be applied and tested. Needless to say, the British Isles are investigated in the same thorough and enlightened way.[1]

Conclusion

Such a course as is here outlined, at once humane and scientific, cannot fail to be a real instrument of education in the hands of a good teacher. Already it is being attempted successfully in our best secondary schools. Accurate and living geographical information is useful and not to be despised, but if geography is to become a true educational instrument it must also be a well-considered "method." Then the facts to be learned will be better held in the mind and more ready for use, by reason of what the psychologist calls "association." The student's mind will be "a library and not a lumber room." And at the same time a good geographical training cannot fail to engender sympathetic understanding of other folk in other lands who are linked to us and to each other by a hundred bonds. Such understanding is the surest way to cement national solidarity and foster World peace.

ELLIS W. HEATON.

[1] On the lines (say) of Mackinder's *Britain and the British Seas* (Heinemann) or *Great Britain*, ed. Ogilvie (Cambridge University Press).

CHAPTER EIGHT

MUSIC

The Problem of the Small School

THE problem of music teaching in secondary schools is by no means so cut-and-dried or capable of so simple a solution as many would have us suppose. On the whole, the very large schools fare better than others in this respect, for there is usually enough work to do there to warrant the employment of a full-time music specialist on the staff. But in the case of the average-sized school the Governors are forced to choose between one of two alternatives : they must either appoint a visiting teacher to come in for a certain period of time and take the classes in music, or find someone on the staff who, though already a specialist in another subject, may also have an interest in the study of music and be willing to teach it in addition to his own subject.

The former plan does not usually work out satisfactorily, for the peripatetic teacher obviously has not the same interest in the school as the regular member of the staff normally has, nor is he ready at hand to make use of the many opportunities for " occasional music making " such as the secondary school provides. Moreover, he is often at a disadvantage in the matter of discipline, for he has probably never been trained in the art of handling classes of boys and consequently seldom manages them successfully, unless, of course, he was born with a natural aptitude for teaching—as few are. Again, even if such a man is available, he will receive only the ordinary salary of the graduate, his degree in music not being reckoned as an Honours degree. The possession of such a degree, however, does not necessarily imply the ability to teach music with success.

On the other hand, the keen amateur on the staff, whatever his main subject is, often produces better results. He is frequently a skilful teacher of his particular subject and can manage a class without difficulty. He will attend suitable courses in music, learn a great deal about it and, by means of class singing and as much " occasional music " as he can find time for, will inspire his pupils with a genuine love of the art. In the very small country schools, however, such a combination of music and one other subject is often impossible, because the smallness of staff makes it imperative that each member of it should be a kind of two-fold specialist in subjects which are essential for the passing of the certificate examination—and that will necessarily rule out music. For the benefit of readers who may be surprised that boys' secondary schools considered large enough to employ a full-time music specialist are very few indeed, it must be remembered that it is still the fashion to consider that as

soon as a boy's voice " breaks " (as it is called) he is no longer fit to pursue the study of music in any shape or form. Some of the results of this unfortunate idea are noted in the chapter on Music in the Elementary Schools (see page 731).

Influence of Examinations

The status of music in a secondary school depends almost entirely on the headmaster's attitude towards it, and he is the sole arbiter of its destinies there. In Scotland there is a definite ruling that music should be taken throughout the school course, but in this country there is no such uniformity. As the main practical aim of the secondary schools, as at present constituted, is to pilot pupils through the General Schools Examination, and as the percentage of those who at present offer music as one of their subjects in that examination is about 1 per cent. of the whole,[1] it is not surprising that class music is often dropped at the earliest opportunity. To what extent it may be considered an economical policy to teach a subject (which every pupil is capable of enjoying) for two years or so and then to drop it is a question which deserves some consideration.

Varying Conditions

The time given to music and the equipment provided will be adequate only if the headmaster really believes in the value of music; and, in the growing number of schools where this is the case, the pursuit of music is not without its influence on the cultural and corporate life of the school.

The Better Type of School

Here the normal time allowance is two periods a week up to and including the third year, and then one period each for the rest. In such a school the equipment is usually better than that of the elementary schools in the neighbourhood. The piano in use is often a tuneful and serviceable instrument, while both song and reading books, as well as the gramophone, are readily provided. In such schools the music reading often reaches a good standard, and musical dictation forms an essential part of the regular course. A fair proportion of the older pupils offer the subject for the General Schools Examination, and music thus plays a very definite part in the life of the school. Moreover, it will have its own voluntary choir—not hastily improvised to fill out the proceedings on the annual Speech Day, and its orchestra—not hurriedly impressed at the eleventh hour to accompany the conversation of the parents who attend that function; but each a permanent and co-operative institution as important and well respected as the cricket or football team. By means of the gramophone the older pupils will be enabled

[1] *Education in England and Wales in* 1932, pages 28 and 29. (H.M. Stationery Office.)

to hear good records of great masterpieces, and to all will be given regular opportunities for the massed singing of suitable songs in the Assembly Hall.

The Usual Type

At present, however, it must be admitted that such a flourishing condition of things is the exception rather than the rule. In most secondary schools, of course, most of the first- and second-year boys have one, and some perhaps two, regular singing lessons a week, but whether the third-year have it or not depends upon the headmaster, and so there is no uniformity in the matter.

The songs selected are invariably good, though somewhat limited in range. The chief weakness is the neglect of music reading owing to lack of time, but there are a few keen teachers who by their enthusiasm and perseverance have won for music in their schools such honourable mention that their headmasters, convinced and converted by results, are willing to enlarge the musical opportunities of their pupils by allocating more time to the subject. This is often done by grouping two parallel forms together for singing, while giving them each a separate period a week for ear training and reading, thus economising the teacher's time.

In the average school there is seldom a room set apart for music teaching, and the Hall is the normal venue. This arrangement is often unsatisfactory, the Hall frequently being a main thoroughfare, and the interruptions caused thereby being very disconcerting both to the teacher and his class. Moreover, the necessity for transporting chairs or benches for the use of the class not only curtails the already limited period, but tends to disorganise both the opening and the conclusion of every singing lesson. As most of the other masters are accommodated in their own subject rooms, it is not easy to understand why music is usually cold-shouldered in this fashion.

Many of these schools, none the less, can boast of a choir or orchestra, and sometimes both, though these are generally out-of-school pursuits. That they are so numerous is all the more remarkable when it is realised that most secondary schools draw their pupils from a very wide area, which means that as soon as school is over most of them must run to catch the earliest available train, bus or tram in order to get home and tackle their homework. In some secondary schools these voluntary organisations reach a high standard of attainment, and their combined efforts, usually reserved for the annual concert, are often more attractive to listen to than those of many adult organisations of a similar type. Gilbert and Sullivan operas, of course, are the standing dish for many, but most progressive teachers use them merely as a stepping-stone to the rehearsal of greater and more thought-provoking works. To those whose musical experiences are limited to and by the former, the study of music can scarcely seem to be the big adventure which its professors claim that it is.

The Morning Assembly

In the majority of these schools, the Morning Assembly with its prayers and hymns is often a moving experience for the casual visitor. The poetry is invariably chosen from some highly reputed collection of hymns, and the tunes are often virile and forthright. The practice of extending the time of the Assembly so as to give opportunity for the massed singing of suitable secular songs is evidently on the increase, and is to be commended if only for the opportunity it gives the older boys of keeping their voices " in tune."

Neglect of Concerts

In the few towns where orchestral concerts for young people are arranged by the local education authority in school hours it cannot be said that the response from the boys' secondary schools is very encouraging. The reason usually alleged for this is that the time of the concert happens to coincide with the games period, and therefore the music must go ; or other school work will be interrupted and therefore none of the scholars will be available. None the less, it is unfortunate that the very boys who would be most likely to profit by attending at least one of these concerts a year, being gifted with more brains than their fellows, are debarred from going.

Wireless

It is not surprising, on the other hand, that so few schools take wireless music lessons. Adherence to the time-table in a secondary school is necessarily more rigid than in the elementary school, and it is very unlikely that it could be conveniently modified week by week to admit " the voice from the studio." The fact is, at the present time, that the majority of the secondary schools are not interested in the broadcast music lesson.

Other Activities

The same may be said with regard to their attitude towards some of the more recent developments in musical education, e.g. the making and playing of musical pipes. This as yet has scarcely begun to receive attention, but there is no reason why it should not be taken up with zeal in schools where it is considered harmful to encourage boys to sing when once their voices have changed, though the possibility of harm accruing to these when used for shouting in the playground or on the sports field is not apparently considered. At any rate, if these older boys are not allowed to sing, at least they may be permitted to blow.

In a few schools, and those mainly in the north, some very efficient Morris and sword-dancing is done, providing a welcome relief from the stereotyped form of concert which is the normal bill of fare on Speech Days. The popularity of House Competitions in music is certainly growing, and in schools where the idea is taken seriously a great deal of unexpected musical talent is unearthed.

Conclusion: Weakness of Music in Secondary Schools

This is all to the good, for as things are it cannot be said that the boy with musical ability is given a fair chance of developing it in the average secondary school. In most of the larger schools, however, such opportunities are usually provided in good measure, but unless musical talent is successfully discovered over a much wider area than it is at the present time, it is not easy to see from what sources our music teachers of the future can be drawn.

With this thought in mind, it may be well to conclude our estimate of the position of music in boys' secondary schools. There are few who would deny that it is probably the weakest subject in the curriculum from many points of view. At the same time it must be remembered that the average parent regards it purely as a cultural subject which has no " bread-and-butter " prospects for the future ; and that is precisely the objection to it which most headmasters have to face. But there is much more in music than that, as many of our headmasters now fully recognise—and the number of those who do is slowly but surely increasing.

CYRIL WINN.

CHAPTER NINE

Practical Subjects

THE present time is opportune for reviewing the position of Practical Subjects in Schools. These are of comparatively recent introduction in secondary schools, but they have had an established position in the elementary schools for something like forty years ; and their future in secondary schools can best be judged by a survey of their position in other post-primary schools.

No education can achieve its fullest value if it excludes a whole range of experience: experience through the senses. This experience is of fundamental importance in that it forms the basis on which our civilisation has eventually been raised and which is at the foundation of everything we term " academic." First-hand experience, moreover, arouses the child's interest. One of the great changes noticeable in education in recent years is the way in which the children's interest has been stimulated. Because of their heightened interest greater progress has been made during their school years, and they have taken away with them an influence which will profoundly affect their future lives.

Modern methods of production are decreasing the labour required in quantity and quality. In quantity the hours of workers are decreasing : in quality the demands on them are less. Instead of spending seven years in learning a trade, the worker too often learns a process in seven days. The old craftsman had a joy in creative work—a joy which had a very deep, lasting and stabilising influence. This is often denied to the modern worker. Only in the schools and through the efforts of educationists is there any hope of the re-establishment of the crafts in anything like their old estimation. Any considerable revival in crafts must come through the school and the amateur.

Craftsmanship demands good taste. Good taste, the ability to enjoy and appreciate good design, whether in form or colour, whether in material or in workmanship, is a gift that comes to some people instinctively. To most of us, and especially to children, it comes only through careful consideration and comparison and by a definite attempt at training and development. That it is worth the effort there can be little doubt. Nothing in the long run is more satisfying, more lasting or more inherently productive of happiness, in youth or in age, than a developed taste. It is therefore a factor that cannot be disregarded in modern education, and its development can best be sought through the crafts.

I. The Elementary Schools

Historical Development : The Formal Phase

The first form of handicraft instruction was the teaching of woodwork in separate " centres." The early instructors were mainly craftsmen who had served their time at trade cabinet making or joinery and took a simple qualifying examination. The schemes of instruction consisted of courses of " models." Small articles of simple form were designed to introduce the boy gradually to the various tools and processes. On the whole, the early schemes were laboured and took a considerable time in teaching the elements of the craft. The type of object figuring in the scheme was often crude in design ; so long as the objects made in the later parts of the course would do their work, little regard was paid to appearance or proportion, and few of the boys did much beyond the making of these formal models. The instruction even at this stage, and in spite of its obvious disabilities, proved to be of considerable value. This type of instruction, passing through various phases, persisted with modifications until after the war. In the earliest phase the aim was that of pure craft teaching, and the success of the teacher was judged solely by this. If twenty objects were made, it was not uncommon for the inspectors in those days to put the whole group of work together, rejecting all those that were not exactly the correct size and assessing the teacher on the remainder. Naturally enough a revulsion of feeling set in against the formality of this early instruction.

Self-expression

Teachers who had been successful in teaching other forms of handicraft in their schools, such as bookbinding, clay modelling, etc., on broader and more generous lines, were appointed to supervisory posts, and many of these felt that close attention to the elementary craft processes could be carried too far. They advocated a wider freedom for the boy and more opportunities for the use of his intelligence, going so far in some cases as to suggest that the boy should be allowed to find out how to use the tools and to make whatever he wanted, or thought he wanted, at the moment. This was the phase of " self-expression." Conceived on broader lines, it was an advance upon the formality of the earlier phase, but it was little, if any, advance educationally. It overlooked the fact that unless the woodwork was well taught much of its value was lost, that woodwork processes are methods that have taken many thousand years to develop, that the operations involved need considerable precision, that to be effective they should be carried out in a fairly well defined order, that, in short, there is a definite technique at the basis of any craft, which must be seriously learned if the craft is to be successfully practised. These fundamentals must be mastered before the boy is really in a position to make the things that he wishes to make. Fundamentals must come first.

Group Work

The next development was also influenced by educational considerations. It was the stage of " group work," in which the boys were encouraged to act together in order to make larger articles for use in other parts of the school work, such as pieces of apparatus for use in science, gardening, geography and history teaching. There was a definite stage of " correlation " in which it was advocated that the articles made should preferably have a value in connection with the teaching of other subjects. The advantage of this stage was that it kept a purpose in view, that the articles made were of definite utility and needed at the time. It had a tendency to lessen the gap between the manual teacher and the rest of the staff and it brought the handicraft instruction into closer connection with the rest of the curriculum. Pushed to extremes it sometimes led to a boy having to make a quantity of educational apparatus whether he wanted it or not.

There was widespread variation in the type of work in the different parts of the country, depending largely upon the attitude towards the work of the local supervisor or inspector. In one district the early stage of formal craft instruction persisted unchanged for years, while in another the work was of a much wider and more interesting kind, and in yet another, perhaps, much more trifling in character and cruder in execution. These variations were only to be expected and were natural stages in the development of a new subject, stages through which most other subjects have at various times passed.

Post-War Changes

Since the war a number of new factors have entered into the problem. Two special training colleges now give a considerable part of their time to training their young teachers in various forms of hand craft. In addition, over twenty of the other men's training colleges and a number of the women's training colleges give anything up to five or six hours a week to this kind of teaching. There is thus entering the teaching profession a new leaven of men whose training has not been exclusively academic, who are as well educated as other teachers, but have a practical bias and are able to carry one or more of the traditional crafts to a reasonably high standard.

Shortly after the war the Board of Education reorganised its handicraft inspectorate. The men appointed to do this work were men of the type just mentioned, men of a good general education, able to inspect all the usual work of the school, but with a special bent in this one direction. They could not only talk about a craft, but could do it themselves ; on the other hand, they were broad enough in their education to be able to put handicraft into its proper place in the school curriculum. As the older supervisors and inspectors retired, the local authorities followed the Board's example.

During the last ten years or so it has been clear that the wide-

spread variations previously existing are disappearing. Consultation between the Board and the local authorities, conferences of inspectors, etc., have contributed to this end, and the position is becoming stabilised. The general conclusions reached are roughly as follows :

Present Practice

Any craft taught in a school should be a traditional craft, one of those on which our civilisation is based. This does not include the frequently invented and ephemeral art crafts of various types. Naturally it includes woodwork ; metalwork (the simple formal processes adopted by the engineer) ; art metalwork (generally beaten copper) ; bookbinding ; book craft, which includes not only bookbinding, but lettering, illustration and the cutting of the necessary blocks in linoleum or wood, printing and making up, form and colour ; pottery ; and science-apparatus-making as a development of the woodwork and metalwork. For the girls, weaving, starting with simple raffia and working up to the use of simple looms ; embroidery and the various small textile crafts which enable a girl to train and exercise her taste in her own clothes ; basket-making ; upholstery ; and the decoration of the home. There are exceptional cases in which the girls have been taught woodwork, and it has usually been found that the girls fall very little behind the boys in their aptitude.

For the boys the three main crafts are woodwork, metalwork and book crafts. As a rule book crafts are taken in the ordinary class-room, and, if there is sufficient accommodation in the practical room for one craft only, woodwork is usually taken unless local needs or the special aptitude of the teacher make metalwork more desirable.

Schools which, for various reasons, cannot provide either the accommodation or the equipment necessary for woodwork or metalwork sometimes attempt to give some woodwork training with an inadequate and often improvised equipment, used in a class-room or hall. Where such conditions obtain, a training in accurate craftsmanship cannot be expected, and such training should be given through some other craft than woodwork. Profitable use can, however, be made of a small woodwork equipment by the making of articles such as garden requisites and apparatus for science and school crafts. In such circumstances it is quite possible to teach the common joints and also small household repairs.

The size of the class in these subjects is smaller than is usually taken in other subjects. Twenty has been regarded as a reasonable number in a senior or central school, and this is rarely exceeded to any great extent. In secondary schools, where this work has traditionally occupied a less important position, forms of thirty or so are taken.

Woodwork

This is carried on usually in a well-equipped woodwork shop. The boys work two at a bench and they have the usual range of

carpenters' tools. They are given formal instruction in the use of the saw, the plane and the chisel, and they are taught to make the four common joints which are the basis of all woodwork construction. This instruction used to be given incidentally, as there was a theory current that the boys would not be interested in it unless it was disguised. It has been found, however, that the boys are so keen on learning to do the work well that nowadays it is getting more common to give this instruction in formal and definite fashion. Where this is done, this elementary stage is often mastered in six months. The boys have then nearly another two years during which they are taught to make well-designed pieces of woodwork, to consider the form, proportion and material of the pieces and any necessary decorative and finishing process, and to take an interest in the tradition of the subject. By visits to museums, etc., something is learned of the development of the home and of furniture, and, in the art or drawing lessons, pupils are taught to take an interest in colour as well as in form and proportion. In this way, with the help of a small library of textbooks, a boy is able to take some part in the designing of the pieces he is to make in the later stages. There is no doubt that some of the recent work that has been done on these lines will be a considerable asset to the boys in after-life. It is of real cultural value, stimulating and developing taste, and likely to form habits which will have a stabilising influence, and to create interests that will be of great value in the proper use of leisure.

Metalwork of the more Formal Type

This is usually taken as a subsidiary craft, and in this case the equipment is not expensive and is often used at the side of the woodwork room. There are now, however, many well-equipped metalwork rooms furnished with lathes, drilling machines, forges, etc., where the boys are taught to use these and the ordinary bench tools, and to do simple soldering, brazing and riveting. They learn to file and fit pieces of iron or steel, to make small tools and science apparatus, and to do simple repairs.

Art Metalwork

There have been several types of pseudo-art metalwork, using very thin foil with a minimum of tools. These kinds of work have hardly justified themselves, and they have largely disappeared. The usual work is now done in a fairly stout copper plate. The materials are cheap—copper sheet and wire; the tool equipment is fairly simple and much of it can be extemporised. The work involved is, however, serious, and embodies a good many processes. The articles made are solid, useful, artistic and effective. Small bowls, trays, dishes, jugs, etc., are quite common.

Book Crafts

This range of crafts is widely spread for several reasons. While it lacks the solidity of the previous two crafts, it needs considerable

precision and it covers a range of materials. Materials and tools are simple and cheap ; the materials being mainly paper, card and bookbinders' cloth, and the tools mainly knives, rules, scissors, with perhaps one or two presses and a plough, often home-made. The work can be done in the ordinary classroom and, owing to the absence of heavy tools, often with a whole class of forty children. The craft can be carried on all through the school, starting with small children making simple folders which they decorate and letter. Later on, small wallets can be made, into which their loose papers are put, or small filing cabinets, gramophone record cases, etc. ; and useful work can be done upon the repairing of the school books. The older children can make and bind books in which perhaps they letter their selection of poetry, or they may print their own school magazine, writing the matter, cutting the blocks, setting the type, printing and binding the finished publication. This craft lends itself to small, simple, fairly precise and accurate work, and it is capable of being carried over into after-school life, as it demands a minimum of equipment.

Weaving

This is a craft of comparatively new introduction. It has, however, been found of considerable value to girls. On the smaller home-made looms the girls weave ties, belts, hatbands, etc. A number of schools now possess larger looms, on which usable widths of cloth are woven. This craft affords considerable opportunity for training taste in colour combination and arrangement. While it can be done in rule-of-thumb fashion, in some schools the designing of the pattern in colour, the translating of this to the threads of warp and weft, and the ultimate working out on the loom are exercises demanding considerable intelligence.

Summary

The practical work in the primary and post-primary schools, which has become more or less stabilised on these lines, still falls short, in a good many places, of the standard that could be achieved, but there is no doubt that substantial advances have been made. In any of the crafts above enumerated the technical standards are usually thoroughly sound, and the type of article produced has been much improved of late. In the best schools the improvements have been considerable, and the standard of work now being achieved would have been declared impossible a few years ago. Woodwork, metalwork, weaving and bookbinding articles, well designed, well finished, with restrained decoration, of good proportion and in good taste, are common. There is no doubt that the ability to execute work of this type and character will have considerable effect upon the future lives of these children. The control achieved over the materials used will form the basis for occupations in later life that will usefully occupy leisure and afford opportunities for satisfying the creative impulses that exist in most of us, while the careful

consideration of form, proportion, decoration and colour should lead to a considerable improvement in the taste of the coming generation and in the satisfaction of the æsthetic side of nature.

II. Secondary Schools

The position with regard to the secondary schools, while rapidly developing, is less satisfactory. The hampering effects of the school certificate examination, and more particularly of the matriculation examination, are well known. They tend to the development of a purely academic type of education and to the exclusion of all practical work. Within the last few years, however, handcraft in wood or metal has been accepted as a subject for boys by all the examining bodies except one, and this is leading to a gradual improvement of the conditions. Considerable encouragement has been given to the work in some secondary schools, and there are now a number where it takes a serious place. Between 1930 and 1932 the numbers offering the subject have increased from about 950 to over 1,300. The Board of Education has endeavoured to encourage the subject by holding courses of instruction in crafts, which aim at training the graduate members of school staffs in various forms of craftwork. In most of the secondary schools, however, handcraft is still regarded lightly. The time devoted to it is short, sometimes only one period, three-quarters of an hour, per week, and only exceptionally more than two periods, an hour and a half a week. To do this work effectively a minimum of two and a half to three hours a week is really necessary, but few secondary schools are in a position to give this amount of time. The time-table is already overloaded in other directions.

The "Oundle System"

Several schools have recently organised their instruction on the lines followed at Oundle, where every boy goes into the workshops for a whole week a term. This solves time-table difficulties, and headmasters who have tried the system say that the general work does not suffer from the loss of the time taken up with practical work.

Mr. Potter, of High Pavement School, Nottingham, in a lecture to the Association of Technical Teachers, describes the system in these terms :

> "I propose to outline what I will call the Oundle system, which has already been introduced successfully into more than one day school and even into several central schools. The main principles laid down are that every boy in the school shall receive workshop training ; that it is essential that every citizen, whether he be a leader in industry or a professional man, should have a ready sympathy with the artisan, as the best method of eliminating the superiority and inferiority complexes of our various classes of society; that the work attempted must be real if it is to be enjoyed and appreciated by boys of all ages ; that this real work shall consist of the production of furniture, apparatus, etc., definitely required in the various school departments ; in other words, service.
>
> "Now, if the usual practice of one double period per week is adopted,

only small work can be attempted, and endless time is wasted between periods in putting away one lot of work and fetching out another, to say nothing of limited storage accommodation. One job of work hangs on from week to week and the interest of senior boys cannot be maintained. This has led to the introduction of the weekly system, in which, about once a term, each form in turn suspends ordinary work for a complete week, which it spends in the school workshops. Under such conditions, formal systematic instruction ends with the boy's first year; subsequently he is engaged in the production of articles which have been ordered by the various departments, the work being selected, of course, to suit each form's experience and ability.

"The creation of skilled craftsmen is not a main object. In the first place, it would be quite impossible in the limited time available; in the second place, the secondary school boy was never intended to become an artisan. Similarly, there is no justification for any attempt being made to equip a secondary school metal shop with the latest mass production machine tools, whereas in technical institutions they may very well be considered essential. I much prefer to give the boy, at this stage, an insight into the work of the craftsman of former days; if he is to enter industry, he will come into contact with mass production methods all too soon."

At Oundle School, as in most public schools where any attention is given to the subject, the handicraft instruction is given by artisan instructors under the direction of a graduate master. Every boy from 11 years of age is put for a compulsory week a term into the workshops. No boys escape. It is part of their general education. The boy who is to be a parson or a solicitor does his work equally with the boy who hopes to be an engineer. Apart from the compulsory time, there are two voluntary periods, of an hour and a half a week, and the majority of the boys who are free put this in.

Training on Production

The principle of the instruction is training on production. The school makes all kinds of furniture for its rooms and apparatus for its science laboratories. Horses are shod, furnace bars cast, and stoves and grates repaired. There is no attempt at an educational approach. The boys are just taught to do the job in the way that experience shows is best. The first lesson in woodwork is to learn to sharpen a plane; one of the first lessons in metalwork is parting off pieces of round steel bar in a lathe. Tools get broken and the machines sometimes get damaged, but the net result is a repair which provides an interesting job, and there is no doubt that this direct attack saves a very considerable amount of time.

The Heat Engine Laboratory has been fitted up by the boys, and among the apparatus made for the Mechanics Laboratory are all kinds of testing machines and, for electricity, even such instruments as moving coil milliammeters.

In this school the boys get a great range, not only of the ordinary processes in woodwork and metalwork, but also of all sorts of odd sidelines in methods that have to be adopted to finish satisfactorily a particular job. They are engaged on real work on full-size jobs and they produce things that are really needed. This gives

a reality and importance to the work which it does not possess in some schools. The time spent on it makes the boys more practical in their attitude to the rest of their school life, including their academic studies. The wide experience of mechanical processes and methods which they get here during their school life must be a great advantage to them in many ways in later life, when they are in responsible positions either in the services, the professions or in industry.

An Engineering Course

As an example of the better type of secondary school which takes this work seriously, the following details may be given of a definite course in engineering at a particular school, based on a preliminary two years either in wood or metal. The purpose of the course is to give, so far as possible in the time allotted, a knowledge of the science and technique of engineering. Boys taking the course sit, normally at the end of the second year, for the Northern Universities school certificate and take papers in mechanical engineering and handicraft (metalwork), in which they have no difficulty in reaching the " credit " stage.

The syllabus is as follows :

(1) *Engineering Workshop Practice.*—This includes the usual processes, tool making, use of gauges and setting up machines, including lathes, milling machines and shaping machines.

(2) *Mechanics.*—Up to school certificate standard with practical work. Heat engines (simply treated).

(3) *Practical Geometry.*

(4) *Machine Drawing,* which is designed to give a high skill in drawing, ability to read working drawings, and a knowledge of some of the simple principles involved in designing machines.

Equipment.—(*a*) Machines : one 6-inch lathe, screw cutting, sliding and surfacing, fitted with overhead gear ; one sensitive drilling machine, capacity 0 to ½ inch ; one large Smith's forge, fitted with high-speed fan ; one Denbigh No. 1 milling machine ; one 12-inch shaper ; one 6 × 6-inch power hacksaw ; and one 6-inchand one 4½-inch S.C. & S. lathe. These are driven by electric power, and the total cost of the equipment was about £550.

(*b*) Benches fitted with vices (18) and apparatus for brazing and soldering.

(*c*) Mechanics' apparatus, the larger pieces consisting of hydraulic tanks, Marcet boiler and friction apparatus.

(*d*) A motor-car engine.

In connection with the foregoing, full use is made of actual engine parts. In the case of machine parts, sketches are made from machines in the workshop, from which complete working drawings are made.

There are separate workshops for metalwork and woodwork.

It is interesting to note that during the five years 1925-30 forty-nine boys at this school took the engineering course, and of these five left after gaining a school certificate, four after gaining a matriculation certificate, five after gaining a higher school certificate ; thirty-four entered engineering works, twenty-one obtaining employment with firms who engaged them because they had taken

an engineering course. Five entered Leeds University and one is now reading for the Ph.D. degree.

It is also interesting to note that, up to 1932, every boy obtained employment within a month of leaving school, though the town is not an engineering centre.

The possession of a leaving certificate stating that the holder has passed in handicraft (metalwork) or mechanical engineering is of great importance to a boy entering industry, as is evident when employers are interviewed; but the fact that both subjects are in Group IV, and do not count in the awarding of a matriculation certificate, tends to make them appear of minor importance.

III. Summary and Conclusion

A thoroughly sound system of instruction in craftwork in elementary schools has been worked out and it has stood the test of time. It has proved to be an educative and civilising influence of high value. And it seems clear that in the ampler leisure to which the present reorganisation of industry is likely to lead, it will afford an outlet for the creative impulse that so many possess, which is denied them in the present mechanical subdivision of labour. It can thus in troublous times become a stabilising influence of considerable value.

Only a small proportion of secondary schools take up the work seriously, and it is almost ignored except as a hobby occupation in the public schools. Where it is taken it has impressed the school staff with its great value. The standard in more academic subjects does not suffer, and the wide range of interests it brings is an asset of great value in later life. It is a matter of regret that so few of the secondary and public schools have yet recognised this.

A. S. BRIGHT.

CHAPTER TEN

Domestic Studies in Girls' Schools

The Key Position of the Secondary School

As will be seen from Table 6 on page 47, all "senior" girls' and mixed schools, with insignificant exceptions, provide courses in Domestic Subjects, about 60 per cent. in Centres and about 40 per cent. on the school premises. The same is true of "all-age" girls' schools, though only about 5 per cent. of these can provide instruction on the school premises. Even the all-age mixed schools make a good showing, since about two-thirds of them make provision in Centres and another 9 per cent. on the school premises. The framework of a comprehensive system of housecraft teaching has thus now been set up, but the success of this system depends mainly on the quality of the teaching and therefore on the courses provided in the secondary schools and training colleges where future teachers receive their education. In approaching the question of housecraft instruction in post-primary schools, therefore, it seems desirable to concentrate attention on the secondary schools, since it is these schools which offer the key to the problem and, moreover, it is in these schools that housecraft at present unfortunately occupies a less assured place in the curriculum than in other post-primary schools.

History

The Education Act of 1902 exercised a revivifying influence upon two important movements for the better education of girls, which had found public expression about the middle of the nineteenth century. They were directed, in the first instance, to supplementing the education of adults. The one grew into a vigorous campaign for securing higher education for women; the other into a crusade for improving the home life of the community by means of education in housewifery. The Act offered opportunities for extending both movements.

Wealthy pioneers of the industrial era had tempered their antagonism towards the old land-owning aristocracy by imitating their mode of life, including the custom of educating daughters at home; and the demand for private governesses consequently increased. Many of the newly-rich mothers were too recently released from the drudgery inseparable from household work, unintelligently performed, to desire their daughters to be trained in the business of housewifery. The pursuit of this robust element of womanly education, which had given solidity to the refinement and minor graces of the aristocratic great lady whom they desired to imitate, gave place to activities that were merely ornamental.

Schools, deflected by this new lead, gave disproportionate attention to accomplishments. Needlework was almost banished from the curriculum. Girls in boarding schools often employed a woman to darn their stockings while they occupied themselves with " fancy-work." The Victorian acceleration of the normal upward movement of social classes was fertile in the production of the fine lady, and also acted as a diluent of the quality of her teachers.

1848–72

The emergence of this travesty of the great lady served a purpose in advertising the lack of facilities for the education of girls, and in stimulating the movement for its extension. This movement began with courses of lectures for governesses, leading to examinations and certificates, and resulted in the institution of Queen's College, Harley Street (1848), and Bedford College (1849). Frances Buss, who founded the North London Collegiate School for Girls in 1850, and Dorothea Beale, who regenerated the Ladies' College, Cheltenham (founded in 1853), in 1858, were students of Queen's College. Their work, with that of other distinguished people, prepared the way for the National Union for the Improvement of the Education of Women of all Classes founded in 1871. This Association gave birth to the Girls' Public Day School Company in 1872, which established within a few years a number of schools in London, and other large towns, whose aim was " to supply for girls the best education possible corresponding with the education given to boys in the great public schools."

1873–96 : *The Training Schools*

The movement to provide education in housewifery was most notably advanced at the third International Exhibition, organised at South Kensington in 1873, when a large section was devoted to food and cookery. Courses of lectures on the scientific principles of cookery were given by the Organising Master of the Science and Art Department,[1] under whose direction practical applications were carried out by a French chef and four women assistants. Queen Victoria attended one of the lectures, and members of the Royal family took an active interest in the enterprise, which led to the founding of a National Training School of Cookery in July 1873. The lectures attracted distinguished people from different parts of the country, under whose influence and support similar schools were established in the provinces during the ensuing few years. The National School undertook the training of teachers from the outset, and the first Cookery diplomas were issued in 1874. Other domestic subjects were added to the curricula of the training schools as time went on, and representatives of the different committees of management became valuable members of the National Union for the Technical Education of Women in Domestic Science which was

[1] The late Mr. J. C. Buckmaster.

formed in the early eighties. Efforts to improve the teaching of needlework met with a measure of success that led to the founding of the London Institute for the Advancement of Needlework in 1878.

The training schools provided a variety of courses in domestic subjects for students of different types, as well as diploma courses for teachers. Many training schools employed a staff of itinerant teachers for extra-mural work. The earliest pupils were adult women and girls who had left school. As time went on there arose a demand for courses for schoolgirls, and this, too, was met at first by the training schools. The demand fluctuated in the secondary schools and comparatively few maintained regular courses of lessons in cookery and household management. Headmistresses generally found their energies absorbed by the struggle to fit their pupils into the educational mould that served for their brothers, and to furnish proof of the educability of girls by means of similar examination tests. This demanded concentration upon an academically-minded minority and left little time to explore the possibilities of studies that were not followed by boys. A few schools dealt with the theory of food and cookery in relation to personal hygiene. Here and there tentative beginnings were made to work out schemes of domestic science by teaching cookery and housewifery in connection with physics and chemistry.

The Report of 1896

The Education Department conducted an investigation into the teaching of domestic subjects in 1896, when it was found that needlework was usually, and cookery rarely, taught to girls in high schools and other secondary schools. Some schools employed specialist teachers of needlework to prepare girls for the examinations held by the London Institute of Needlework. Some prepared girls for the examinations in hygiene and physiology held by the Science and Art Department. Some (chiefly private schools) arranged for their pupils to attend courses of lessons at a local School of Cookery. Similar arrangements were sometimes made for pupils to be instructed in First Aid and Sick Nursing. Here and there individual schools were found teaching a fairly wide range of domestic subjects efficiently on their own premises. Some of these were attempting to correlate the science course with cookery. Taking the country as a whole, however, the investigators' conclusion was that there was "a tendency to view the whole of the domestic subjects, except needlework, as extra subjects outside the ordinary school curriculum and, except in a few special cases, and incidentally in others, there is no great effort made to incorporate domestic sciences or arts with the general education of the girls."

The Act of 1902 : *The Women Inspectors*

The position had not changed appreciably when the administrators of the Education Act of 1902 began their work. Sympathy

with the ideals which had inspired the promoters of the parallel movements for higher education and for education in housecraft led to the institution of a corps of women inspectors competent to assist with the inspection of every type of school, college and institute falling within the purview of the Board of Education. The Board's report for 1904–5 stated that: "There are many matters that women alone can satisfactorily handle, and the Board believe that the steps they have taken . . . will have many useful results. . . . Junior Inspectorships for women have now been abolished, and a staff of Women Inspectors created which now numbers eleven. They are organised under the Hon. Maude Lawrence, who was specially selected for this work, and appointed in March last as Chief Woman Inspector. . . . Their duties will be to undertake inspection and enquiry into all matters specially needing the scrutiny and advice of a woman, and their work will not be limited to particular districts."

A few women inspectors were specially engaged to assist with the inspection of secondary schools: their work was entirely with the secondary branch of the Board. This branch was created in preparation for the expansion of secondary education under the 1902 Act. Some women inspectors were selected for their special qualifications and experience in domestic subjects. Their duties took them into every type of school and other institution, within the purview of the Board, where housecraft was taught. They assisted, in the capacity of specialists, with the "full inspection" of secondary schools. The Board's regulations for secondary schools required that: "Provision should be made in the case of girls for instruction of a practical character in the elements of housewifery. For girls of 15 years of age an approved course in Domestic Subjects may be taken instead of Science."

Maladjustment between Secondary and Training Schools

Inspection revealed that, where other branches of housecraft than needlework were taught, the lessons were frequently too short to admit of adequate treatment for such subjects as cookery and laundrywork. But even the most constructive criticism was apt to bear hardly upon time-tables precariously balanced. Headmistresses and inspectors were usually in agreement when criticism was directed to the quality of the teaching. Inspectors were sometimes apt to carry out their duties in a missionising spirit. These included the inspection of the training schools, which were suffering from the generally poor intellectual quality of the product of the secondary schools that fell to their lot to train as teachers. While admitting the desirability of feeding the training schools with better students, headmistresses showed no great willingness to take very active steps in that direction. Some headmistresses were repelled by the starkly utilitarian attitude displayed by most of the training schools, whose slender resources compelled deference to a public opinion

interested merely in technical proficiency. And the opening out to girls of opportunities for higher education demanded vigilance for their development. Any expression of bias towards differentiation of curricula between the sexes, based upon domesticity, was apt to be suspect because it seemed incompatible with such development.

1906–1911 : *First Signs of Improvement*

A movement for reconciling these two ideals was even then (*circa* 1906) beginning to make itself heard. It found partial expression in renewed efforts on the part of the training schools to meet the needs of secondary schools for a less didactic treatment of housecraft. Third-year courses of training were instituted, such as Science applied to Housecraft, and Cookery with Cognate Science, for selected students. Important progress was made in 1908, when a three-year course in Home and Social Science was provided by the Women's Department of King's College, of the University of London. This advance had a stimulating effect upon the schools, and many requests were made to the Board of Education for information and advice regarding the different lines along which the study of housecraft might be pursued. Some schools laid chief stress upon the scientific aspect of the subject, while others regarded it mainly as a branch of handwork that might be developed educationally. The subject was included in the general question of practical work in secondary schools which the Board referred to their Consultative Committee in June 1909. The Committee was directed to consider the following questions affecting girls :

" (i) Is it desirable that courses of Domestic Economy or Housecraft should form part of the education of girls in secondary schools during the whole or the main part of school life ? or, (ii) Could this form of education be more usefully concentrated upon the year or two years immediately before leaving school ? or, (iii) Should it be deferred till after the close of the secondary-school course, at any rate where the leaving age is under 17 ? "

The Memorandum of 1911

The Board's response to applications for advice was of a general character during the four years that their Committee sat. But, in order to assist the schools with the information already available in 1911, they issued an interim memorandum on the teaching of housecraft in October of that year. It referred to the following types of schools :

" (*a*) High Schools, i.e. schools in which the normal leaving age is 17 or 18. The upper forms in many of these schools work on the lines of university scholarships. A certain proportion of girls leave from the middle forms, expecting to earn their own livelihood in some profession or business, but a large number leaving both from the upper and middle forms do not intend either to take a university course or to earn their own livelihood. Many will probably take up

the management of private households, where they will have to direct the work of others.

" (*b*) Secondary Schools (Girls), in which the normal leaving age is about 16, except in the frequent case of girls who intend to become elementary-school teachers. The majority of girls in these schools look forward to earning their own living, while those who remain at home will generally share the work of a small household.

" (*c*) Secondary Schools (Mixed). The home conditions and future careers are much the same as in (*b*). In this type of school the curriculum, being frequently conditioned by the requirements of the boys, presents special problems of organisation due to the leaving age and affecting the place of Housecraft in the curriculum, especially in the upper part of the school."

The memorandum gave examples of typical schemes of work and syllabuses that were in actual operation in all three types of schools. These suggested that, while some correlation of science with housecraft was general, it was not universal. The memorandum performed useful spade work in clearing the ground for further argument and experiment among those who advocated independent courses in science and housecraft and those who believed in a closely correlated or combined course.

The Report of 1913

The full report of the Consultative Committee on the teaching of handwork was published in 1913. The committee had examined fifty-two witnesses, including seven headmistresses, three mistresses of science and four specialists in domestic subjects, whose evidence led them " to form a very high estimate of what a school training in handwork can do to develop mind and character." Domestic subjects, including needlework, cookery, laundrywork and housewifery, were accepted as educational handwork, with the qualification that " in applying the term ' handwork ' thus widely we are not forgetful of the fact that the amount and the importance of the strictly manual work involved in these subjects varies widely, and that it may, in some cases, take a very secondary place."

While broadly assigning these subjects to girls, and woodwork, metalwork, etc., to boys, the committee did not favour a rigid demarcation of subjects according to sex, especially in the earlier years. They expressed a belief that " in educative value, needlework is not inferior to any of the other crafts. It demands and affords opportunity for the training of accuracy of hand and eye, a lively æsthetic attention and vigilance in devising means to ends." A whole chapter was given to domestic subjects, and the belief that a general education for girls that does not include some training in housecraft is incomplete was implicit throughout the report. Stress was laid upon the value of definite co-operation between school and home : " many homes can be counted on as contributing educational assistance in these subjects." Nevertheless, it was

thought that all school courses should be complete in themselves, although it was recognised that " the amount of work done in the secondary school, perhaps more especially in schools preparing girls for the university, will not in itself be enough to secure adequate efficiency ; but if it lays sound foundations of skill and stimulates interest in all the problems of the home, the girl will go on educating herself effectively during her after-life."

The educative value of cookery was admitted and the question of its correlation with science examined. The witnesses were agreed that there was room for developing the natural relations that exist between the science teaching and the work done in the housecraft lessons, but attempts to force the pace of correlation were to be deprecated. One important witness stressed the necessity for a substantial background of science before beginning the study of the chemistry of cookery. The committee advocated a two-year course of housecraft, to be taken from 13 to 15, or from 14 to 16 according to whether the leaving age was 16–17 or 18–19. The point they desired to safeguard was that " the course should not begin so early as to miss a considerable portion of girls because they come too late. Neither should it begin so late as to miss in its second year many of those who leave too early."

King's College of Household and Social Science

Meanwhile, the movement for carrying domestic studies up to a university standard was making substantial progress. The Women's Department of King's College had become a separate college of the University in 1910 and the Home and Social Science Department was made an independent department. The word " household " was substituted for " home," and the University instituted a Diploma in Household and Social Science. This advance was not without influence upon the schools, many of which were beginning to regard housecraft as seriously, and to treat it as intelligently, as any other subject of the curriculum.

In 1914 needlework was taught in almost all, cookery in about half, laundrywork and housewifery in a considerable number of secondary schools. Schemes of work and syllabuses suggested a healthy diversity of treatment, but their general trend was towards the introduction of scientific method and the principles of æsthetics into household affairs.

The War

This advance was checked by the war, which drew specialist teachers, among others, to various forms of war service. Some of the vacancies could not be filled at all, and others only inadequately by inexperienced teachers, many of whom were unable to maintain a good standard of work. Also, the war drove a wedge between theoretical and practical knowledge. For while the need for exercising rigid economy in the use of materials which it imposed gave a direct impetus to advanced work upon foodstuffs in some of the

universities, its influence upon the schools was to encourage merely didactic teaching and technical proficiency. The manipulation of war rations to produce palatable meals absorbed much teaching power. Also, war conditions caused a dearth of domestic workers and the home duties of schoolgirls were thereby increased. As housecraft not only shares the general sensitiveness of the education service to economic and social changes, but is itself peculiarly responsive to any fresh demands that they make, it was not surprising that war-time teaching was apt to take short cuts to obtain quick returns in the form of little cooks and sempsters.

University Courses

The retarding effect of the war upon an educative treatment of housecraft persisted for some years. A measure of compensation was provided upon higher levels, where the impetus which war conditions gave to the study of food values continued, and still continues, to gather force—for instance, in the training colleges for teachers of domestic subjects and in some of the University Colleges. Notably, King's College of Household and Social Science, which has carried out important research work upon foodstuffs for many years, offers well-graded special courses in Dietetics suited to different types of students, including teachers. A new full-time one-year diploma course in Dietetics will be inaugurated at this University College in October 1933.

The Report of 1923

Part of the aftermath of the war was the necessity for more girls to earn their own livelihood. Although a wider choice of careers was open to educated girls than at any previous time, most of them demanded examination records which domestic studies did not help to furnish. Their prestige was further lowered in those many schools where they were reserved for non-academic (frequently used as a euphemism for " rather dull ") girls only.

The Consultative Committee of the Board of Education, which had been suspended during the war, was reconstituted in 1920, when it was directed to consider and report upon the question : " Whether greater differentiation is desirable in the curriculum for boys and girls respectively in secondary schools ? " The ensuing report[1] included a historical sketch of the curriculum and a consideration of (1) the curriculum in use in 1922, (2) general physical and mental differences between boys and girls and possible causes of such differences, (3) general anatomical, physiological and psychological differences between boys and girls, and (4) general differences between boys and girls in respect of social environment and social function. The seventy-two witnesses examined by the Committee

[1] *Differentiation of Curricula between the Sexes in Secondary Schools.* H.M. Stationery Office, 1923, price 2*s.* 9*d.* net.

included men and women doctors, psychologists, inspectors, head and assistant masters and mistresses, directors of education, representatives of examining bodies, bankers, business men and employers. In addition to oral evidence, a large number of memoranda on specific issues were received.

Careful study of all the data thus obtained led the Committee to the conclusion that : " our enquiry has not imbued us with any conviction that there are any clear and ascertained differences between the two sexes on which an educational policy may readily be based. . . . It would be unwise to base any differentiation in the curriculum in secondary schools upon the existing differences in the work done by men and women, as experience suggests that the division of work between the sexes has changed frequently in the past and that the range of employment followed by women is likely on the whole to increase." The committee made strong recommendations for greater freedom in the curriculum. While their scholarly report did not suggest very full appreciation of the educative possibilities of domestic studies (e.g. page 126, paragraph 3, ignored the progress of these studies at King's College), it recognised their practical importance, and fully admitted their title to a place in the curriculum. The Committee did not think that these studies should be confined to girls, and they welcomed " signs that boys are being encouraged to take some share in the duties of home." [1]

Present University Recognition of Household Sciences

London

The status of domestic studies had been raised in 1920, when the University of London recognised the King's College three-year course and granted the B.Sc. Degree in Household and Social Science. Further progress was made in 1923, when the B.Sc. (H. & S.S.) Degree was included among those degrees in which, by regulation of the University, successful candidates are arranged in three divisions, those in the first and second divisions receiving the B.Sc. Honours (General) 1st or 2nd Class, and those in the third division a Pass B.Sc. Degree. The position was further improved in 1928, when the Household and Social Science Department of King's College for Women was recognised as an independent School of the University under the name of King's College of Household and Social Science. Students who have obtained a B.Sc. (H. & S.S.) Degree are allowed to enter for the B.Sc. Honours examination in physiology, without a subsidiary subject, in the year following that in which the B.Sc. (H & S.S.) was taken. Facilities are offered also for post-graduate and research work upon certain conditions. In 1932, 18 students obtained the Degree of B.Sc. (H. & S.S.), of whom 7 had second-class honours. The number taking their examination this year (1933) is 24.

[1] See recommendations 1, 3 and 10 on pages 138-40 of the *Report*.

Bristol

Comparable recognition of Domestic Studies has so far been accorded by only one other of the universities. In 1926 the University of Bristol, in collaboration with the Gloucestershire Training College of Domestic Science at Gloucester, planned a course for the ordinary degree of Bachelor of Science applying to candidates specialising in domestic science. It covers a period of four years, which includes three consecutive years spent at Bristol University, together with four weeks spent at the Gloucestershire College during the long vacation in each of those years, and a fourth year devoted entirely to work at the College. The first small group of students to be accepted for this course were granted the B.Sc. (Dom.Sc.) degree of the University of Bristol in 1931. Seven graduates hold this degree at the present time, and ten were reading for it in the academic year 1932–3.

Present Housecraft Courses in Secondary Schools

The promotion, in 1931, of domestic subjects to a place on the list of those that are allowed to count towards the minimum number of subjects required for the award of a School Certificate has improved their position in many schools. A minority have always maintained that domestic studies possess a cultural value, both for girls who would go on to a university, or other institution for further education, and for those who would stay at home. Some schools have encouraged these studies by giving them a place in their general scheme for internal examinations and tests and by including the results in the general school marks. But the majority called for the spur of an external examination.

Relation to Science

At the present time, domestic subjects are taking a not unimportant part in the general progress and development of secondary education. They are responding to a larger conception of their content in many schools where they have ceased to be limited to technical instruction in the home arts. An increasing number of schools are proving a claim that a special course of science associated with household work appeals successfully to the interest of most girls. These have found that an ordinary course of general science planned for boys and girls up to the age of 14–15 makes the best foundation for a more advanced course dealing with everyday problems in home or institutional life. It is fully recognised that the solution of these problems calls for trained intelligence and active common sense, and the special schemes of work in science related to housewifery, laundry-work and cookery are designed to draw out these qualities in the student.

Relation to Art

The prevailing broader conception of the content of housecraft is finding joyous expression also on the art side, especially in schools where a concordat has been successfully established between the needlework, the housewifery and the art mistresses. Many quite advanced schemes in needlecraft, which provide for sound constructional work and for the handling of a wide range of materials and colours, are in operation. Fruitful contact with the art lessons is shown in the good designs and colours of the embroidery and other decorative work, which completes garments that are æsthetically satisfying and so minister wholesomely to the natural interest of an adolescent girl in her personal appearance. Housewifery, which, perhaps, provides a more immediate channel for altruistic activity, has also rich gains to show from its association with the art studies. These may be seen in soft furnishings, such as curtains, bed covers, etc., and in upholstery, including covers for box ottomans, footstools, etc., and in many other things that are included in the lessons on the furnishing and decorating of a home.

Other topics occurring in the housewifery and household management lessons are: personal and household hygiene, first aid and sick nursing, household economies and the keeping of accounts, the care and management of infants and young children.

Distribution of Courses

Needlecraft is taught to girls in all types of secondary schools, and the other constituent subjects of housecraft are included in the curriculum of all schools maintained by a local education authority. The number of first-rate private and public schools offering courses in housecraft is increasing. Fourteen of the twenty-five schools of the Public Day School Trust, which is the largest organisation in England for providing higher education for girls, provide courses in Domestic Science. Girls from four of these schools took domestic subjects at the General School examination in 1931. But the courses are post-scholastic in most of these fourteen schools. The syllabuses in use in most of the schools indicate that great importance is attached to the study of food and cookery. Recent returns from 747 schools show that cookery is taught in 80 per cent. of them.

One thousand eight hundred candidates, divided between 242 schools, offered domestic subjects at the General School examination at midsummer 1933. The examining bodies concerned have kindly furnished information which shows how the candidates are distributed among them. The University of Bristol had 33 candidates from 3 schools; the University of Cambridge 235 candidates from 38 schools; the University of Durham 176 candidates from 14 schools; the University of London 239 candidates from 36 schools; the University of Oxford 306 candidates from 45 schools; the Northern Universities Joint Board 811 candidates from 106 schools.

The National Council for Domestic Studies

Many high schools and other secondary schools, both public and private, provide post-certificate courses in housecraft which appear to be very popular. Some of these schools take the examinations of the National Council for Domestic Studies.[1] This examining body is a Council of 74 members consisting of representatives of universities and other institutions, of associations and of individuals interested in domestic studies. The Council issues general schemes, in which theoretical and practical work appear to be well balanced, upon which the schools may base their syllabuses. Seven hundred candidates, of whom 643 were successful in obtaining certificates, took the Council's examinations in 1932.

Post-scholastic Courses

Post-scholastic courses, which do not lead to a degree, are provided at King's College of Household and Social Science and at the University of Reading. Similar courses are available also at some secondary schools, at the training colleges for teachers of domestic subjects, at many polytechnic institutes and at several proprietary schools of domestic economy.

Effect of the Economic Crisis

The world economic crisis, which came to a head in this country in 1931, stimulated the body politic into remedial activity, and the pursuit of practical knowledge by many housewives. The overhauling of private incomes and expenditure, made grimly necessary by the crisis, showed how ruinously costly rule-of-thumb household administration could be. The demand for instruction in domestic subjects filled the different institutions that supply it and the long waiting lists of candidates for admission are showing no signs of diminution in 1933. Many family budgets owe their balance to recently acquired housewifely skill, and many depleted dress allowances have been made good by means of needlecraft lessons. Many adult daughters, unexpectedly faced by the necessity for earning a livelihood, have discovered that there are numerous remunerative occupations calling for educated women, who have taken an appropriate course of training in domestic subjects. A wide range of courses, some of which are highly specialised, are available at the different institutions mentioned above.

The Next Step

It has been shown that students who wish to pursue the study of domestic science at a university up to the standard required for a degree are limited to a choice between a three-year course at King's

[1] The National Union for the Technical Education of Women and Girls in Domestic Science was reconstituted as The National Council for Domestic Studies in 1917.

College of Household and Social Science, University of London, and a four-year course at the University of Bristol, the fourth year of which must be spent at a College of Domestic Science associated with the University. Assuming that domestic studies are not merely fragments of knowledge directed solely to material well-being, and that their credentials are now sufficiently established to entitle them to a place in a higher educational scheme, it would seem to be desirable that yet another university, preferably a northern one, should inaugurate a degree course related to domestic studies. It may be that they are a fundamental and essential part of human culture, the depreciation and neglect of which at academic levels in the past is largely responsible for the gap that exists between the achievements of natural science and the progress of ethics. In a favourable atmosphere, they might help to develop a vital integration of utilitarian qualities and spiritual values for the service of humanity.

HELEN SILLITOE.

CHAPTER ELEVEN

Physical Education

THE importance of physical exercise in the education and development of youth is not a modern idea. The peoples of the oldest civilised states of which we have any knowledge knew and practised physical exercises and games of various kinds. The ancient Greeks, in particular, excelled in all branches of physical education. They believed that if physical perfection was cultivated, moral and mental excellence would follow and that, without this, national culture rested on an insecure basis. Physical education formed a constituent part of the educational systems of Locke, Rousseau and Pestalozzi and, about the end of the eighteenth century, physical exercises were definitely introduced into the work of the schools in several European countries. From that time Germany and the Scandinavian countries made great strides in this branch of education. Although games and various sports have been practised in England for centuries, little was done in the schools until about 1871. For many years Army textbooks provided the basis for the physical training, and little progress appears to have been made, owing to the lack of system and want of qualified teachers.

In 1904 the Board of Education issued a Syllabus of Physical Training for use in the elementary schools. This syllabus was based on the Swedish system of educational gymnastics, which is the only system of gymnastics founded on physiological principles. Unlike the Scandinavian countries and Germany, England has never possessed a national system of gymnastics. The Swedish formal exercises alone, however, have proved insufficient for the English temperament, and experience has shown the necessity of adding other activities, in order to meet the requirements of our climate, habits, physique and general racial characteristics. In 1909, and again in 1919, the Board of Education issued revised editions of the syllabus.

Since 1919 the narrow, rigid and rather formal type of drill has been superseded by a more elastic and adjustable system of bodily education, which aims at the concurrent development of healthy physique, keen intelligence and sound character. Organised games, swimming, folk dancing and other health-giving activities are now regarded as essential parts of a comprehensive scheme of physical education. The training has been adapted to the needs and capabilities of the various stages of childhood, and into it have been introduced the essential elements of freedom and enjoyment. During the past fourteen years, the progress made in the elementary schools has been remarkable. It is generally assumed that boys and girls in secondary schools are better off as regards physical

education than their brothers and sisters in the elementary schools. In the better secondary schools, particularly in the girls' schools, this is certainly the case. Gymnasia and playing-fields are provided ; expert instruction, small classes, suitable clothing and more or less adequate time are also arranged for. There is an excellent tradition of systematic physical training in many girls' schools, and a supply of well-trained women gymnastic teachers is always available. Modern methods find a good amount of support in the girls' schools, which are less bound by tradition and more willing to experiment than the boys' schools. But, generally speaking, the position in the boys' secondary schools is not satisfactory, owing to the shortage of trained men gymnastic teachers and to the feeling, which seems still to exist in some schools, that field games supply all that is necessary for boys in the way of physical exercise.

The Purpose of Physical Education

The purpose of physical education is the general improvement of the physical condition of the child. It seeks to develop the vital resources and to give to the body the activity it requires by means of movements which are designed to exercise all its parts. It assists in the development of the mental powers and the formation of character. It also aims to educate the child in the wholesome use of leisure time and to arouse a love for a vigorous, healthy life.

In its broadest sense, physical education includes gymnastics, organised games, swimming, dancing, athletics, camping and all other forms of physical activity which help to produce a healthy constitution.

Gymnastic exercises are necessary because of their value in the development of good posture and bodily control generally. They form the basis of the child's physical education, for through them he learns to use his bodily strength to the best advantage. Games are indispensable for the development of character. They are also of great value in securing a sound condition of bodily health and fitness. Swimming is possibly the best all-round exercise in which a child or adult can indulge, whilst from dancing and camping useful physical and educational benefits are derived.

Time devoted to Physical Education

It must be confessed at once that the time devoted to the subject in many secondary schools is often inadequate and compares unfavourably, both in amount and distribution, with the time devoted to the subject in the elementary schools. Some form of physical activity is now given daily in the elementary schools. Speaking generally, the value of systematic physical training for the child throughout its secondary school life is not yet appreciated. In many schools a satisfactory amount of time is devoted to the subject in the lower forms, but this is reduced as the child grows older and the pressure of academic work becomes greater. It is not uncommon to find that the pupils in those forms which are preparing for

external examinations have no physical training at all, or so little as to be almost useless. This is particularly unfortunate, if not exceedingly unwise, when it is remembered that these children have to contend with the extraordinary physical and mental stresses of adolescence, as well as engage in work which demands increased mental output and concentration. These children are peculiarly in need of wisely directed physical exercise to relieve the nervous strain of brain work. Health is the first asset of any boy or girl, man or woman. In too many schools, however, the "matriculation bogy" plays havoc with the physical education of the older pupils. It would be interesting to compare the external examinations results of pupils who have continued their physical exercises, or who have even devoted more time to physical activities, during the time of preparation with the results obtained by pupils who have done rather less than the average or normal amount of exercise.

Of course, the problem of adequate time is a difficult one in many schools, on account of lack of accommodation or suitable facilities, but it is obvious that if physical education is to be something more than a mere formality in the school curriculum, and thus accomplish its aims, it must be regular and frequent. As many days as possible should be covered by some form of organised physical activity. It may be lessons in the gymnasium on two days, swimming on the third and games on the fourth. Two forms of physical activity on the same day should be avoided. For the gymnastic lesson the usual school period of 40 to 45 minutes is generally suitable, though for the younger pupils more frequent lessons can often be secured without adding to the amount of time allotted to the subject, by shortening the periods to 30 minutes. If the playing-field adjoins the school, junior forms might be allotted two periods of 45 minutes each for games, rather than the more usual arrangement of one period of 90 minutes. Circumstances might also justify such an arrangement even for the older pupils.

The Teacher of Gymnastics

In the girls' schools the teacher of gymnastics is usually a specialist teacher who has attended a physical training college for a course of training extending over three years. For many years physical education has proved an attractive career for girls of good education, and there is an adequate supply of well-qualified women teachers. In small schools the gymnastic teacher often teaches hygiene, or assists with some other branch of school work.

In the boys' schools the position is rather different. In the past, the secondary school gymnastic master was generally an ex-Army or Navy non-commissioned officer. Many of these men are still employed. There is, however, a limited number of men teachers who have been trained in gymnastics at the Chelsea, Dunfermline, Sheffield or Silkeborg (Denmark) Physical Training Colleges. These physical training colleges unfortunately no longer train men

students. At present, the Glasgow Physical Training College, which provides a course of training extending over three years, is the only institution open to men students. For several years the Board of Education organised a short course in physical education, which was held during the summer vacation at Eastbourne. This course was open to men teachers in secondary schools only and was designed to meet the urgent need for men of the right type and educational attainments to teach gymnastics in those schools. Although these courses were very successful, it is obvious that short courses of this type could only be regarded as a temporary expedient. The Carnegie Trustees have now generously provided a new physical training college for men at Leeds, which will be opened in the autumn of 1933. The course of training will extend over one year, and only graduates or certificated teachers will be eligible for admission. This is a sound principle, for there is much to be said in favour of the gymnastic teacher being able to give instruction in other subjects. It is therefore hoped that in the near future a steady supply of well-qualified men teachers will be available to meet the requirements of the boys' schools in regard to gymnastics.

Gymnastics

The majority of secondary school pupils have previously attended an elementary school and have therefore received a good preliminary gymnastic training. The scheme of instruction in the secondary schools is based on the same principles as that of the elementary schools. The exercises are carefully chosen and graded, so as to obtain the maximum of effort without undue fatigue or strain. In the elementary schools it is customary for the class teacher to give the instruction in physical exercises. Specialisation is rarely possible. In these circumstances, the scheme of work must necessarily be simple in character and within the knowledge and capabilities of the teacher. In the secondary schools, where a trained specialist gymnastic teacher is available and the facilities are better, it is possible to make use of more advanced exercises, particularly of exercises on gymnastic apparatus.

The type of training given in the secondary schools has undergone considerable change in recent years. Modern developments in the Scandinavian countries have filtered through to this country and have influenced the work in many ways. The change is to be found not only in the methods of teaching, but also in the exercises employed. The old rigid mechanical type of discipline has been replaced by a less formal but more effective type, based on the development of self-control through enjoyable and purposeful activity. There is now a greater opportunity for individual practice and for co-operation on the part of the pupil in the organisation of the lesson. The methods of teaching are more natural and interesting. Rhythm and relaxation are important features of the work, and the exercises themselves are performed with less rigidity and without

the unnecessary waste of energy which was so frequently a failing in the past. The importance of the cultivation of good posture is more fully realised and the children are trained to acquire a natural, easy and upright carriage of the body.

These changes are unquestionably to the good. The greater use of rhythm, especially, is a move in the right direction, for the principle of continuity in gymnastics, as exemplified in exercises performed with a " rhythmical swing," is an important one, which has not been made enough of in the past. Recent developments in Denmark have focused attention on these exercises. It must be remembered, however, that they were used primarily in Denmark as a form of gymnastic training for stiff and awkward agricultural labourers. They were peculiarly effective in developing suppleness and relaxation in these men. They require careful adaptation to suit the age and capabilities of English boys and girls—a fact which has been forgotten by some over-enthusiastic gymnastic teachers. In some schools, rhythm is used excessively and without due regard to shape and form in the movements. The work consequently lacks precision and definiteness. At first view, the children appear to be working hard, but on closer inspection it is obvious that many are making very little effort and much of the value of the lesson is being lost.

It is now customary to divide the gymnastic lesson into two parts. The first part is devoted mainly to corrective exercises, and the second part to recreative activities, such as vaulting, jumping, games and agility exercises. For the first part of the lesson the children usually work in mass under the direction of the teacher, but for the second part they are divided into several teams working more or less under the direct control of team leaders, though, of course, subject to the general supervision of the teacher. The introduction of the team system has been an important factor in the improvement of the standard of physical education in elementary and secondary schools. The essential factor in the system is the " pulling together " of the individuals who compose the team. It is possible to develop a healthy spirit of competition between the various teams and to increase to a considerable extent the amount of work done during the lesson.

The Board of Education has not issued a definite scheme of training for use in secondary schools, but for preparatory schools and departments the Board's *Syllabus of Physical Training* provides a useful introduction to the Swedish System. In 1927 the Board published *The Reference Book of Gymnastic Training for Boys*, which is a useful guide to the most suitable type of training for boys between the ages of 7 and 17. This book contains a large variety of carefully chosen exercises, which can readily be adapted to meet all conditions of accommodation and equipment.

The Gymnasium

In order to develop the training along sound progressive lines a gymnasium is essential. There are still many secondary schools

without a gymnasium. In some the hall is equipped with gymnastic apparatus. Whilst a good hall is obviously much better than nothing, it has to be used for so many purposes, other than gymnastics, that it cannot be considered as an effective substitute for a gymnasium. A well-equipped gymnasium makes possible the introduction of a wide range of interesting and valuable activities. The desire to climb and jump is innate in every healthy child, and jumping and vaulting exercises are therefore excellent activities for the growing child. They develop courage, self-reliance, agility and bodily control to a greater degree than any other form of gymnastic exercise. Most of the Swedish apparatus is designed for class work, and the whole class can be kept fully occupied with the minimum of waiting for turns. In the boys' schools, exercises on the horizontal and parallel bars, which were usually made to suit the apparatus rather than the body, have been replaced by exercises on Swedish apparatus and by agility exercises, which demand a high degree of courage and skill.

The Hygienic and Social Aspects of Physical Education

The hygienic and social aspects of physical education have made great strides in recent years. Provision is now made in many schools for the children to have a shower bath after the gymnastic lesson. Difficulties have sometimes been encountered in getting the children to use the shower baths, but with perseverance and careful organisation these difficulties have gradually been overcome and a most useful and hygienic practice has been established.

There has been a marked improvement in the gymnastic costume worn during the lesson. For boys the ideal costume consists of a pair of football shorts only. This is becoming the usual costume in many schools. The girls are also being encouraged to take off their tunics and stockings.

This is a move in the right direction, for the free light clothing encourages the children to move freely and easily, whilst enabling them to conform to the well-established hygienic principle of putting clothing on *after* exercise and wearing the minimum *during* exercise.

Remedial Exercises

As a result of the routine medical inspection of secondary school children, gymnastic teachers are frequently called upon to undertake the treatment of children who require special exercises to overcome some physical defect. This brings the gymnastic teacher into close contact with the School Medical Officer and often results in valuable co-operation, which has a beneficial effect on the general health and physique of the children.

Organised Games

The value of healthy recreation has been known from time immemorial. In this country, games and athletics are a national

heritage and it is only to be expected that they should be allotted an important place in the scheme of physical education. Games and athletics are valuable because they afford an opportunity for vigorous exercise in the open air. They are also valuable on account of the useful lessons they provide in sportsmanship, esprit-de-corps and self-control. It is true that many games can be played in the gymnasium or playground, but the greater space and grass surface of the playing-field are essential for the major team games.

It is satisfactory to see that the majority of new secondary schools are built with a playing-field adjoining the school.

To be of real educational value games require careful organisation and coaching, for under an incompetent teacher, or one with the wrong attitude, the child may easily develop the objectionable qualities of self-conceit and selfishness. Usually, the gymnastic teacher takes a prominent part in the organisation and coaching of games. It is customary, however, for other members of the staff who are good exponents of the various games also to take an active share in the work. It is essential that the training should be progressive and that all the children should have an equal opportunity of playing and being coached. In the past, the school teams have often received most attention, and the weak or average players have had little or no coaching. Happily, this state of affairs is rapidly disappearing and it is now generally admitted that every boy and girl should have an opportunity of acquiring familiarity with, and skill in, a number of games and sports which may be continued when school days are finished. The boys and girls who will obviously never be very good at games present a problem which has not yet received sufficient consideration. To such children games must always be merely a duty, if not actually a penance. It is possible by careful organisation to provide these children with games and activities which are based on foundations of enjoyment, zest and satisfaction.

Naturally, the great national games occupy the chief position in the scheme. There are, however, many other valuable games and preliminary practices which might usefully form part of the scheme of training, but which are at present frequently neglected. These games make an equal demand upon team spirit, tactics and co-operative play; they also make use of such basic operations as throwing, dodging, tackling and catching. These games are especially suitable for the younger children, and in addition to being enjoyable in themselves they offer the best possible training for the national games.

Games have made great progress in the girls' schools and a fine games tradition is being developed. Netball, hockey, lacrosse, cricket, rounders and tennis are now played enthusiastically by girls.

Closely linked with the games organisation is the House system, which is such a prominent feature of many schools. Inter-house matches arouse keen interest and healthy competition.

It is, of course, desirable that children should always change for games, though it is becoming increasingly difficult to maintain this ideal, for in these days of unemployment and reduced incomes the parents of many children find difficulty in providing them with the necessary clothing and special footwear.

It is also desirable that where suitable facilities exist the children should be encouraged to have a shower bath after the games. If a bath is out of the question, they should have a good rub down before going home.

Athletics

Athletics is a branch of physical education which has come into great prominence in schools during recent years. More definite athletic training is now given, and the Annual Sports mark the culminating point of the training. It is extremely important to guard against the risk of strain in connection with the practice of athletics. The training should be carefully graduated and should form a part of the organised games course. The programme of events for the Sports requires careful consideration, and no child should be allowed to compete in a large number of events. In some schools a " Victor Ludorum " trophy is offered for competition, but the wisdom of allowing children to take part in an excessive amount of competitive athletics in one day is open to question, owing to the risk of overtaxing physical capabilities.

Swimming

For the healthy child, under suitable conditions, swimming is one of the best forms of exercise he or she can practise. In addition to its valuable effect on physical development, it contributes to habits of bodily cleanliness and provides a pleasurable recreative activity for leisure time. Unfortunately, swimming does not form a part of the scheme of physical education in many secondary schools, owing to the absence of suitable facilities. Some of the recently built schools are equipped with swimming baths, and under such ideal conditions swimming instruction becomes an important part of the school curriculum. In the towns it is usually possible to arrange for secondary school pupils to have the use of the public baths at certain times, but in the rural areas the children have to travel such long distances to the nearest baths that swimming instruction is out of the question. If facilities are such that provision can be made for each form to visit the baths weekly, the difficulties of organisation are minimised, as one of the gymnastic lessons can generally be used for this purpose. If, however, facilities are limited, the instruction may be restricted to the children whose ages range from 11 to 12 years. If children are taught to swim early in their school course, they can become more proficient by practising out of school hours. In some schools successful swimming clubs are organised, the meetings of which are held once or twice weekly. It will be found in town secondary schools that

many children have been taught to swim whilst attending elementary schools. For these children, instruction in life saving and the more advanced swimming strokes may be introduced. Swimming instruction will usually be in the hands of the gymnastic teacher, though in some schools specialist teachers of swimming are employed.

It cannot be too strongly emphasised that the visits to the baths should be for the purpose of instruction in swimming and not for the mere joy of splashing about in the water. Class instruction on the lines suggested by the Amateur Swimming Association in their textbooks has been found the most successful method when large numbers of children have to be dealt with at one time. Special care is required with the nervous child, for confidence in the water is the first essential in swimming. To overcome the nervous child's fear of the water many useful confidence exercises have been devised, and after practising these for a short time most children are able to move about in the water with complete confidence. The main aim of the instruction should be the development of a sound technique, rather than the encouragement of speed swimming. On the whole, girls seem to be the more graceful swimmers, as boys often develop awkward styles in their desire to excel in speed.

The Annual Swimming Gala is becoming a popular function in many schools. As in athletic sports, care should be exercised in the choice of events in order to avoid the risk of undue strain and fatigue.

Dancing

Dancing should be included in the scheme of physical education, as it provides splendid exercise and helps to develop a good sense of rhythm. English, Scandinavian and other folk dances are enthusiastically practised in the girls' schools, but so far dancing has made little progress in the boys' schools, though Morris and Sword dances are essentially masculine dances.

Other Activities

There are other aspects of physical education which are now receiving greater attention in secondary schools. Amongst these may be mentioned camping, rambles and school journeys. In many schools Boy Scout Troops and Girl Guide Companies have been organised with considerable benefit to the children. These organisations provide healthy physical activities, games and practices which appeal to boys and girls. At the same time they develop character, skill and handicraft. The benefits to be derived from camping are inestimable. It is an experience and training of the highest order, leaving its mark for life on the boy and girl. It provides a healthy and jolly holiday. It is a novelty which appeals to the child's love of romance and adventure. A new and valuable relationship springs up between teacher and pupil, one which will have a lasting effect long after the camp is over and school routine

has been resumed. Regular meals, with plain and wholesome food, regular sleep, strict cleanliness and vigorous activity are all features of camp life which soon influence health and physique.

The Future

The coming generation is going to be a people of the open air much more than we have been. Camping, hiking and open-air activities generally are becoming increasingly popular amongst all classes. If we are to keep in touch with the developments of modern life, a much bigger place must be given to physical education in the school curriculum. Life is bound to be strenuous and hard for many of the children who are now attending school. It is for us to give them a good physical background, a sturdiness of body and mind, and a knowledge of how to keep fit and able to face the difficulties which they will encounter. It is essential that the gymnastic teacher should watch the general physical welfare of the children by carefully considering, not only the narrower aspect of physical education, but also its relation to home conditions, the amount of rest and sleep, and the effect of these on the physical condition of the child.

Physical education is at last taking its proper place in the school curriculum, but there is still much to be done to obtain the best results from the work. Carefully controlled observations and experiments are essential if sound progress is to be continued. No more fitting conclusion could be given to this chapter than to quote the following extract from an article which was recently written by Prof. Jacks :

" I think we can hazard a guess that when the Day of Judgment comes and the spiritual values of our cultural activities are added up, those which have concerned themselves with the liberal education of the body will be found not far from the top of the list."

ERNEST MAJOR.

CHAPTER TWELVE

SECONDARY EDUCATION IN SCOTLAND: HISTORY AND TRADITIONS

I. First Period: Parish Schools and Burgh Schools

THE Scottish tradition of secondary education has three main tributaries, two of which are very long, and find their starting-points in two of the varied types of school that constituted the pre-Reformation system.

The first type originated in the towns from an arrangement whereby the teaching service was provided by religious institutions and the school accommodation by the burgh authorities, into whose hands the full management of these schools ultimately passed; and thus arose the Burgh Schools of which many of our present secondary schools are the descendants. They were grammar schools, whose main subject of secular instruction right up to the nineteenth century was Latin grammar and literature. Even English was not usually included, primary education being frequently catered for by schools of a preparatory type.

The second type was the Parish Schools, which began to be founded from about the twelfth century. Originally they furnished a primary education for children in the rural districts, and throughout their history their main concern was education of an elementary nature; but out of this grew a secondary education for selected pupils. They may be regarded as the foundation of the State system—schools of this kind being established by Parliamentary legislation at various times from the early part of the seventeenth century onwards.

The two lines of schools thus started embodied somewhat different conceptions of secondary education. The Burgh Schools were the bearers of a grammar-school tradition, similar in many ways to that of England; the Parish Schools carried a conception of secondary education much closer to that of the present day. Yet they did not differ very materially in regard to curriculum, and both lines bear the stamp of national educational traditions, whose character reflects something of the fervour and idealism of the ages in which they took shape.

The Democratic Tradition

Perhaps the most significant of these has been a belief in the sacred right of every child to a higher education if his natural abilities fit him to profit by it. This is a doctrine which can be traced in the educational activities of the early Celtic and Catholic Churches; it finds a clear and forcible expression in the Scheme of the Reformers as outlined in the *First Book of Discipline of the Kirk* in 1560; and we can follow it through the centuries to the

most recent Departmental pronouncements. " There are no indications," we are told in one of these, " of any tendency to trifle with what should always be regarded as the honourable birthright of every Scottish boy and girl of good natural ability—an indefeasible claim of access to the highest educational opportunities which the country has to offer."

We can trace it in practice as well as in theory—and both in the Parish School line and in that of the Burgh Schools. From the Parish School the child of the cothouse or upland croft could, and frequently did, proceed direct to the university. And the democratic character of the Burgh Schools may be indicated by a striking quotation which Dr. Morgan gives in his *Rise and Progress of Scottish Education*. It is from a speech by Lord Brougham in 1825 where he said : " A public school like the old High School of Edinburgh is invaluable, and for what is it so ? It is because men of the highest and lowest rank in society send their children to be educated together. The oldest friend I have in the world, your worthy Vice-President, and myself were at the High School together, and in the same class were some in a rank of life still higher than his. One of them was a nobleman, who is now in the House of Peers ; and some of them were sons of shopkeepers in the lowest part of the Cowgate of Edinburgh—shops of the most inferior description—and one or two were the sons of menial servants in the town. There they were, sitting side by side, giving and taking places from each other, without the slightest impression on the part of my noble friends of any superiority on their parts to the other boys, or any ideas of inferiority on the part of the other boys to them."

It should be mentioned, too, that when these irrepressible " lads o' pairts " from the cothouses and crofts and the Cowgate left their Parish or Burgh School, they had no lack of facilities for carrying their education to the university level. With four universities, democratic in tradition and reasonable in cost—three of them dating from before the Reformation—Scotland has been better supplied in this respect than most other countries. Without them, secondary education would not have developed as it did ; yet these facilities for higher education which we have had for centuries are perhaps rather a result than a cause of the high valuation of such education which has been one of the prime movers in the progress of the system. Higher education has been a thing which the Scottish parents desired for their children : they have been willing to face privation and hardship for its sake—and the children have been willing to bear their share.

An " End-on " System

In neither of our lines of schools, then, was the difference between primary and secondary education based upon a distinction of social class. The school system of the Reformers—which has acted as

our model—is of the linear type. There is not one line of schools for the rich and one for the poor: and the conception of secondary education which it embodies is the "end-on" one. There is not one kind of school for the child whose education will be purely of the "elementary" type, and another for those who will proceed to the higher stages. Secondary education is not conceived as differing essentially, and from the beginning, from primary education. It is a stage—the middle parts of the educational road—and is to be approached by only one route.

This "end-on" view of secondary education, therefore, made its way relatively early into the Scottish tradition; and all along it has been embodied in pretty pure form in the Parish School line. In these schools education was a unitary whole—the primary stage developing naturally into the secondary, and not being regarded as a different type of education to be developed in and for itself.

This, however, is not so true of the Burgh Schools. Their main concern was secondary education, and as time went on this line tended to pull the system towards the "parallel" form. But it turned back; and the nature of the ultimate fusion confirms one in the belief that it was the Parish School line that always represented the true Scottish conception of secondary education. The "parallel" system tends too readily towards class distinctions to be likely to thrive in a country which produced the *First Book of Discipline* and the old High School of Edinburgh as described by Lord Brougham. Nor could it, in the days of poor means of communication, have been used as the basis of a system which was to do justice to the educational aspirations of the people in the outlying districts of a sparsely populated country.

The Academies

The third tributary of our secondary-education tradition is much shorter. It runs through the Academies, which were established during the latter half of the eighteenth century as a reaction against the narrow classical course of the Burgh Schools, and its contribution has been chiefly in the direction of modernising the curriculum.

II. Second Period: State-aided Schools and Higher Class Schools

The Education (Scotland) Act of 1872 probably accentuated the tendency of the Burgh School line to diverge in the direction just indicated. It made reasonable financial provision for the Parish Schools, and it had not the limitation to elementary education of the English Act of 1870—indeed, the School Boards were enjoined to conserve the secondary education given in these schools. But the schools we have hitherto called Burgh Schools, and which now enjoyed the objectionable title of Higher Class Schools, got nothing from grants, little from rates, and were thus left dependent upon fees, endowments and contributions from the Common Good.

Yet the 1872 Act paved the way for further progress in secondary education, and it was during the period from then to 1908 that the basic structure of the present system was laid. The administrative chaos of the preceding century was reduced ; unity of control was approached both centrally and locally by the establishment of the Education Department, the School Boards and the Secondary Education Committees ; and we began to have the moulding effect of a clearly thought-out national policy.

Up to now we have distinguished our two lines by the names Parish Schools and Burgh Schools, but these are no longer appropriate. Under the former category had now to be included schools established under the 1872 Act ; and since the schools it comprised received benefit from State grants, while the Higher Class Public Schools did not participate in these till later, they were commonly termed " State-aided " Schools. The Burgh School line was now represented by (1) Higher Class Public Schools under the School Boards, and (2) Higher Class Schools under private management.

The " Break " at Twelve

At this period there was a marked increase in the demand for secondary education. Something had to be done to increase the facilities, and there was a choice between two lines of policy. On the one hand, the attempt might have been made to bring the Higher Class Schools completely within the State system, to increase the number of schools of that type, and to develop the State-aided Schools along elementary lines—thus arriving at a parallel organisation like that of the pre-war systems in France and Germany. On the other hand, it was open to the Department to develop the secondary education given in the State-aided Schools, and proceed along the road that leads to linearity. It was a somewhat momentous choice, though an easy one ; for the second course was clearly the one most in harmony with the national tradition, and administrative considerations were strongly in its favour. The requisite financial support was already forthcoming for development of the State-aided Schools ; they were more under the Department's control ; and, as we have seen, the system was better fitted to meet the needs of our scattered population.

What actually happened during this period was the development of the secondary education of the State-aided Schools into a full system of modern secondary education founded upon a common basis of primary education finishing about 12 years. This was no mere upthrust or sidethrust from " elementary " education into the domain of secondary education. It was the natural evolution of a national system along the line of a century-old tradition. And once this system was established in an unassailable position in the life of the country, the other line, represented by the Higher Class Schools, came into conformity with it, and the two long tributaries joined.

Of the details of this process only three call for special mention.

The Qualifying Examination

The first was a clearer definition of the borderline between primary and secondary education, through the institution in 1898 of an examination which later came to be known as the Qualifying Examination. This was taken about 12 years of age, and acted as a hall-mark of the satisfactory completion of a primary course and a guarantee of fitness for entry upon a post-primary course.

The Higher Grade Schools

The second was the entry into our tradition of the "middle school" idea. In 1899 the Department instituted the Higher Grade Schools which first provided a course of three years, the satisfactory completion of which was later attested by the Intermediate Certificate. Many of these soon developed into full secondary schools providing post-primary courses of five or six years leading direct to the university; but since 1899 a three-year course of secondary education for pupils who do not aim at the university has been a characteristic feature of the system.

Supplementary Courses

The third was a beginning with the provision of a form of post-primary education which was not then—and is not yet—called secondary. It was intended to meet the needs of pupils who had still two years of school life after passing the Qualifying Examination but did not desire the three-year secondary course of the Higher Grade Schools, and it was provided for in the 1903 Code by the establishment of Supplementary Courses of four types—Commercial, Industrial, Rural and Domestic.

The Leaving and Intermediate Certificates

Meanwhile the Higher Class Schools went their grammar-school way; but the Department was forging another lever, which, along with the example of the new State-aided secondary schools, and a certain judicious manipulation of grant regulations, could be used to bring them into line. This was the Leaving Certificate which was introduced in 1888, and has acted as the graduation certificate from a full secondary course ever since.

In the early years of its history the Leaving Certificate examination was in separate subjects; and even in this form it won the national confidence and was accepted for various purposes, including, under conditions, university entrance. It secured a uniform and high standard of work and a degree of definiteness as to the purpose and content of secondary education; but before it could be used to effect reforms in the structure of the system it had to be given some organic relationship with the curricula of the schools. By 1902 the issue of certificates in individual subjects was replaced by a system of group certificates: the Intermediate Certificate for three-year courses, and the Leaving Certificate for full courses of

five or six years ; and in 1906 and 1910 respectively these certificates came to be awarded on the completion of curricula approved by the Department. With this power of approval or disapproval of the curricula for certificates of established prestige, the Department could now mould the secondary education to its ideals—and that in both types of secondary school.

So the process of fusion went on, but one difficulty still remains to be mentioned. The State-aided Schools had shown that a satisfactory secondary education could be founded on a primary education finishing at 12, in which such subjects as foreign languages had not been begun before the Qualifying stage. In the Higher Class Schools, however, classics and mathematics were introduced earlier than this, and there was a certain amount of difficulty in the transfer of pupils from a State-aided School. As we shall see, a trace of this traditional difference in our two lines still remains in the system, but even here the Higher Class Public Schools have practically come into line—a process which was no doubt aided by the issue of regulations according to which the curricula of the preparatory departments of these schools had to conform to certain general conditions and had to be submitted to the Department for approval.

III. Third Period : Code Schools and Secondary Schools

Under the Education (Scotland) Act, 1908, School Boards responsible for the management of Higher Class Public Schools were given the same power of providing for them as they had in respect of the other schools under their control ; and these schools may now be regarded as having taken their place in the State system. Certainly no doubt was left by the 1918 Act, under which each of the new *ad hoc* County Education Authorities had the duty of submitting to the Department " a scheme for the adequate provision . . . of all forms of primary, intermediate, and secondary education . . . without payment of fees, and if the Authority think fit for the maintenance or support . . . of a limited number of schools where fees are charged in some or all of the classes."

A new nomenclature is therefore necessary, and, unfortunately, we have to adopt one whose basis is administrative rather than one which is in conformity with the essential educational structure of the system. Scottish schools are now administered under two different sets of regulations—one group under the Code of Regulations for Day Schools and the other under the Secondary Schools Regulations. The former corresponds to what we have hitherto called the State-aided Schools, which at this point included the three-year and five-year Higher Grade Schools and the Supplementary Courses. The Secondary Schools Regulations grew out of a set of regulations as to grants to secondary schools and referred at first to what we have called Higher Class Public Schools. We shall therefore adopt this as the basis of our nomenclature, and from now onwards speak of Code Schools and secondary schools.

Broadening of Secondary Courses

From 1908 to 1920 no important change in the school system took place, but on reading the reports on this period, one is struck by the progressive widening of the content of secondary education, and a gradual change in the attitude to the newer form of post-primary education.

The first is reflected in the changes that took place in the regulations for the Leaving Certificate. Early in the period the Secretary to the Department pointed out that " post-Intermediate courses should not be regarded exclusively, or even primarily, as a preparation for university entrance " ; and that the needs of other higher institutions, of business and industry, and even considerations of " taste and refinement " must be taken into account. The regulations became more elastic, and new subjects were recognised ; but this broadening did not come without a measure of opposition, as is indicated by the fact that about 1913 the Department conducted an enquiry suggested by allegations " that science and drawing are not suitable subjects for inclusion in a curriculum of general education." Fortunately their useful little investigation helped to refute these allegations and to convince the critics that excellence in drawing is not to be looked for only in those who have " no head for anything else."

The Advanced Divisions

As far as the Supplementary Courses were concerned, there was a growing realisation that such courses are doomed to indifferent success as long as they are regarded as inferior to those given in the secondary schools. The Department did what it could to raise their status and constantly emphasised the view that they should " serve as an alternative for the ' Intermediate ' instruction in the Higher Grade Centres—equally efficient but different in kind and suited to different needs." Yet their status did not rise as was hoped. Pupils flocked into the Higher Grade Schools who should never have been there, followed a course unsuited to their gifts, and often left at 14 with a useless smattering of foreign languages and mathematics.

By 1920 the last changes in the system of post-primary education began. In that year the Higher Grade Schools with a five-year course were brought under the Secondary Schools Regulations, and in 1923 those giving a three-year course were also transferred to that category. At this point, the only form of post-primary work coming under the Code Schools was the Supplementary Courses.

In December 1921 the further policy of the Department was adumbrated in Circular 44, a remarkable document which did much good intentionally and a good deal unintentionally. In many ways it mapped out a programme of whose soundness there is little question, but it contained certain irritants and out of the controversies and criticisms thus engendered new ideas and attitudes to post-

primary education have emerged—indeed, are still emerging. Action followed quickly. Within the next three years the Qualifying Examination was abolished, each Authority being left free to make its own arrangements for promotion at this stage; the Intermediate Certificate was abandoned, and the Supplementary Courses were replaced by the present Advanced Divisions, which come under the Code. The system may then be regarded as having reached its present form.

The Present System

Post-primary education now falls into two types: secondary courses of five or six years, and Advanced Division courses of one, two or three years. It is, generally speaking, true to say that post-primary education follows a common foundation of primary education finishing about the age of 12, whose satisfactory completion is attested by the passing of some form of qualifying test. The only significant difference in the regulations for primary education in the Code Schools and secondary schools is that, in the latter, provision may be made "for the initiatory study of a language other than English." This is one of the relics of the two lines of schools, and it would be an unfortunate concession if it caused any difficulty in freedom of transfer at the qualifying stage. In actual fact, however, it does not. In the schools under the management of the Education Committees advantage is taken of the provision in very few cases; and no serious difficulty appears to be felt in transfer at 12 from Code Schools to endowed secondary schools, not under the Education Committees, where the starting of foreign languages before the qualifying stage is much more common.

Under the Code there are 2,924 schools, of which 46 per cent. have Advanced Divisions, and under the Secondary Schools Regulations there are 251 schools, 208 of which have primary departments. Some of the secondary schools, however, offer only a three-year course. They occupy a somewhat uncertain position in the system, and may be regarded either as giving an Advanced Division course of a literary type or the first three years of a full secondary course.

WILLIAM MCCLELLAND.

CHAPTER THIRTEEN

SECONDARY EDUCATION IN SCOTLAND: THE PRESENT SYSTEM

I. Secondary Courses: Aim and Content

THE conception of secondary education in Scotland is now very wide. Any full secondary course has the function of providing a broad general culture, without premature or undue specialisation, which will fit the pupil for entrance to an institution of higher learning, or to the life of commerce or industry. Wide scope for differentiation is afforded; and while the choice of subjects is made, in part, on vocational grounds, none of the courses is of a narrow vocational type. Each subject is expected to be taught from the cultural point of view—with the purpose of cultivating the pupil's powers, awakening his sensibilities, broadening his intellectual horizon and the range of his sympathies, establishing interests that will mean something in his after-life.

No hard-and-fast courses are laid down, but only certain general and elastic principles—some of which are contained in the Secondary Schools Regulations and some in the regulations for the Leaving Certificate. Courses extend over at least five years, and provision is made throughout for training in morals, citizenship, music and physical exercises, and for the study of English and history.

In the early years of the course, provision must, as a rule, be made for the inclusion of geography, mathematics, a language other than English, science and drawing; but during the later years such variations may be proposed as will permit of concentration upon appropriate combinations of subjects.

Choice of Leaving Certificate Courses

The variety of possible courses is best indicated by the list of subjects from which those of a Leaving Certificate Course may be chosen, which is as follows:

I	II	III	IV
English (including Literature and History).	Mathematics.	Latin.	Art.
	Science: any approved combination of:	Greek.	Music.
		French.	Commercial Subjects.
		German.	Domestic Subjects: any approved combination of:
		Italian.	
		Spanish.	
	Physics.	Gaelic.	Cookery.
	Chemistry.		Laundrywork.
	Botany.		Housewifery.
	Zoology.		Needlework.
	Geography.		Dressmaking.
	An Applied Science, e.g. Engineering. Agriculture.		Design and Embroidery.
			Allied Art or Science,

and any other subject specially approved beforehand by the Department with reference to the particular curriculum for which it is proposed.

In all subjects except English, in which there is only a Higher standard, tests for the Leaving Certificate are held on a Higher and on a Lower standard. Candidates must be presented, and are normally expected to pass, on the Higher standard in at least two subjects (one of which must be English), and on the Lower standard in at least two others. A pass on at least the Lower standard in a subject from Column II and in one from Column III is, as a rule, a condition of the award of the Certificate.

The "Normal General Course"

Such are the main provisions determining the content of the secondary courses, and if full advantage were taken of them the system would be well fitted to the needs of a modern community. The Department and the headmasters have long realised that there is a large proportion of pupils actually in attendance at our secondary schools for whom the traditional secondary curriculum is quite unsuited, and that alternative curricula can and should be provided to meet their needs. Yet the proportion of pupils taking courses of a more modern type with principal subjects like art, music, engineering, agriculture, domestic or commercial subjects, while increasing, is not very great—a fact which is not too surprising when we consider that it was in 1827 that English, history and geography were first admitted into the curriculum of the High School of Edinburgh, and only with the proviso that they were not to interfere with the teaching of the really respectable subjects. Far the most popular selection is that which used to be called the Normal General Course, where the principal subjects are English, a language other than English and either science or mathematics. It is a sound course which has proved its value, and the newer ones must stand the same test before they win acceptance by parents and employers. But even within the framework of this Normal General Course the selection of subjects is rather conservative. French remains the popular choice among the modern languages, and physics and chemistry among the sciences, despite the growing feeling that more pupils could, with advantage, take German and that courses in biology should be developed to a much greater extent. Latin retains an honoured place in the curriculum, but is by no means universally elected, and Greek is taken by only a small percentage of pupils.

University Influence

To a considerable extent, the general nature of the secondary courses is still determined by the preliminary entrance requirements and the bursary competitions of the universities; and the university influence is still evident in the treatment of the courses in the individual subjects. There is too much of a tendency to confine these to a solid grounding in the examinable elements of the subject

—to the preparation of a sound foundation on which an honours degree course could be later laid. But on these sound foundations no structure is, in many cases, ever reared; and the boy leaves school without having seen anything of the very parts of the subject where his interest would be best caught—and held. Interest has, in fact, not risen high enough in our scale of values in secondary education; though many teachers have come to suspect that the particular brand of "mental training" upon whose altar it has been sacrificed is a false god, and that the dreary drudgery which has been its traditional form of worship is a waste of time.

Organisation and Staffing of Secondary Schools

The progressive centralisation of secondary education has rendered possible a good standard of building and equipment, and the majority of the schools have convenient, up-to-date laboratories, practical work rooms and gymnasia. Many have playing-fields of their own; but it must be admitted that games have not occupied the same place in our tradition that they have in England. The "lad o' pairts" was not examined in games. He came to school to learn Latin—and he learnt Latin.

Generally speaking, the secondary schools are co-educational day schools; yet they have a corporate life which is being increasingly enriched by the development of out-of-class activities of varied kinds, and an adaptation of the "House" and "Prefect" systems has been used with success in a number of cases.

The specialist system of staff organisation is adopted, though a teacher may take part in instruction in more than one subject. Under the present regulations teachers preparing for work in academic subjects in secondary schools aim at the Teacher's Special Certificate, for which they must have a degree with first- or second-class Honours in the subject they propose to teach. They then undergo a one-year course of professional training, and, in addition, candidates for the Teacher's Special Certificate in a modern foreign language must spend one year of study in a country in which the language is spoken.

The standard of qualification of the teachers is therefore relatively high; and while it cannot yet be said that all the teachers of academic subjects are Honours graduates, we are moving in that direction. All the Department demands, however, is that the Teacher's Special Certificate is to be regarded as the normal qualification for the principal teacher of an academic subject and that, in large schools, a reasonable proportion of other teachers shall be similarly qualified.

Teachers of such subjects as drawing, music, handwork, domestic science, physical exercises, aim at the Teacher's Technical Certificate, for which the general requirements are the Diploma of a Central Institution (e.g. School of Art or Technical College), followed by a course of professional training.

Articulation of Secondary Schools with Higher Institutions

In general, the Leaving Certificate acts as a passport of entrance to the chief post-secondary institutions, which are : (1) the Universities, (2) the Central Institutions (Technical, Commercial, Agricultural, Veterinary, Nautical Colleges, Schools of Art and of Domestic Science), (3) the Training Colleges for teachers.

In the case of the universities, however, certain conditions are laid down as to the passes required, and not all Leaving Certificates would qualify for university entrance. The universities themselves hold Preliminary examinations in March and September, where a student whose Leaving Certificate is not accepted can supplement it by securing additional passes, without re-sitting the whole examination. University entrance may therefore be gained wholly through the Leaving Certificate, wholly through the Preliminary examination, or partly through the one and partly through the other. In addition, the universities hold Bursary competitions where the conditions are again different ; in fact, they differ from university to university, and this multiplication of examinations and conditions is undoubtedly a defect in the system. It has frequently been criticised, and a small step towards its rectification is being taken through an arrangement between the Department and the Universities' Entrance Board, whereby the Spring Preliminary examination and the Leaving Certificate examination will be combined on and after March 1934. While this appears to be a very inadequate reform, the fact that the Department and the Entrance Board have come together is a matter of considerable moment, and affords hope of more courageous attack on the problem in the future.

A point of considerable interest has arisen recently in connection with the Bursary competitions. As the standard of the work of the secondary schools has risen, a higher degree of specialisation in the later years has become possible, and there has been a move towards encouraging this by limiting the number of subjects to be professed in these competitions. Some years ago, for instance, Edinburgh University adopted a system, which it has now decided to continue, under which candidates can profess four subjects or, as an alternative, three subjects, in one of which an additional paper on a higher standard has to be taken. No doubt such specialisation would allow a higher level to be reached in the honours classes of the University, but there is a considerable body of opinion which is opposed to any step that might endanger the broad and generous conception of secondary education for which the Scottish schools at present stand.

II. Advanced Divisions : Aim and Content

Advanced Division courses may be of one, two or three years, and the basic curricula laid down in the Code are given in the 1932 YEAR BOOK, pages 164–5. From these it will be seen that all courses

provide for the continuance of the pupils' general education, and for the study, in addition, of one or more of three alternative subjects: a foreign language, commercial subjects and a group of practical subjects (e.g. benchwork, technical drawing, mechanics; or cookery, laundrywork, housewifery).

The dividing line between secondary and Advanced Division courses cannot, therefore, be drawn upon the basis of content. A three-year Advanced Division course of a literary type may be identical with the first three years of a secondary course; and, indeed, provision is made whereby pupils who leave after completing three or four years of a secondary course may obtain the Day School Certificate (Higher). Nor is it a matter of aim, for the Scottish tradition has always been opposed to narrow vocational or trade education in the day schools, and all post-primary courses aim at general culture. Yet the Advanced Division courses have a definite vocational bias in the sense that the choice of subjects and the content of the courses in the various subjects are related to the vocation the pupil is likely to follow.

The distinction is partly administrative, in that the Advanced Divisions are conducted under the Code and the secondary courses under the Secondary Schools Regulations, and partly a matter of length of course—full secondary courses being of five or six years and Advanced Division courses of three years or less. This is a point to which we shall return later, but, in the meantime it is worthy of notice that any three-year Advanced Division course could readily grow into a full secondary course leading to a Leaving Certificate.

Preference for Literary Courses

As in the case of the secondary courses, an account of the Departmental regulations alone would give an inaccurate impression of the system as it is now. The Advanced Divisions are still dominated by the tradition of the secondary schools, a fact which is reflected in the insufficient advantage which is taken of the practical courses. This is clear from the reports of the inspectors, and the presentations in the various subjects for the Day School Certificates. In 1932 the figures for the Day School Certificate (Higher) were as follows:

	Per cent of the Candidates.
English (including History and Geography)	100
Mathematics	99
Science	95
Drawing	94
French	80
Commercial Subjects	14
Technical Subjects	11
Domestic Subjects	5

Latin, Greek, German and Gaelic are also sometimes professed, and in commenting upon the corresponding figures for 1931 the

Committee of Council say: "In connection with the last three figures, it must not, of course, be supposed that the absence of any of these subjects from the group of subjects in which a candidate is presented for the certificate implies that he or she has received no instruction of the kind. But we should like to see a substantial increase in the proportion of candidates whose instruction in one or other of these subjects has been carried to a stage that warrants its inclusion in the group professed for the purpose of the certificate."

Development of Practical Courses

While it seems clear that too many pupils still take a literary course of a traditional secondary type, steady improvement is being made in this respect, and there are many signs of initiative in developing the practical sides of the Advanced Divisions. Of these may be mentioned the introduction of new crafts (e.g. wool-spinning, weaving, leather-work, basket-making), visits to local industries, the residential system in housewifery, the broadening of the science courses from the traditional course in the elements of physics and chemistry, and so on. Opinion is moving, too, in the direction of a fuller exploitation of such subjects as biology, economics, foreign languages other than French; and towards a less "academic" treatment of all subjects in the Advanced Divisions.

This whole question of the lines of development of Advanced Division courses has recently been considered by the Scottish Council for Research in Education, whose findings are published in a volume entitled *Curriculum for Pupils of Twelve to Fifteen Years (Advanced Division)*, and these may be taken as an indication of the tendencies of thought in Scotland on this matter. They stress the necessity for taking account of the widening horizon of the adolescent, the importance of interest as a factor in planning curricula, and they hold that, as a rule, no subject should be begun which cannot be carried to such a stage that the pupil will be able to carry it on on his own account or apply it in his life. Ancient languages they consider to be unsuitable for most of the pupils, a point about which there is now substantial agreement; and the need for individualisation of instruction should be more fully recognised.

Certificates for Advanced Division Pupils

There are two certificates open to pupils in Advanced Divisions: the Day School Certificate (Higher) for courses of not less than three years, and the Day School Certificate (Lower) for courses of not less than two years. Pupils who leave at or after the age of 14 without having completed two full years in the Advanced Division may receive from the education authority or body of managers a Record of Work showing the stage of advancement reached by them. These certificates are awarded mainly upon the school records of the pupils, but in the case of the Higher Certificate the Department have set a uniform general paper.

The Higher Certificate

Up to 1932 candidates for the Higher Certificate normally professed five subjects, but experience showed that this led to overpressure or to the neglect of subjects like music and physical exercises; and the number has now been reduced to four. The actual regulation on this matter may be quoted in full, as it gives a good idea of the types of course now being offered: It reads:

"All candidates must be presented in—
(*a*) English with history and geography;
(*b*) Arithmetic;
(*c*) The characteristic subject of their course, viz.:
In *Literary Courses* a foreign language;
In *Commercial Courses* penmanship, bookkeeping and shorthand, with typewriting or (for boys) business procedure;
In *Boys' Technical Courses* benchwork, technical drawing and mechanics, or (in seaboard schools) navigation and seamanship;
In *Girls' Technical Courses* cookery, laundrywork and needlework with dressmaking.
In *Literary Courses* and *Boys' Technical Courses* geometry and algebra, and in *Commercial Courses* algebra must be offered in addition to arithmetic.
(*d*) The fourth subject may be science (pure or applied), or art, or crafts; or it may be selected from among the subjects named above if not already professed."

Size and Distribution of Advanced Division Centres

The policy of centralisation which was begun with the Supplementary Centres has continued with the Advanced Divisions. Scotland has, of course, many districts where centralisation is impracticable; and in these cases the Advanced Division may consist merely of one or two pupils in a rural school who are taken by the head teacher along with several other classes below the qualifying stage. But where it can be carried out without undue inconvenience it has manifest advantages in that it reduces the number of schools where expensive practical work facilities have to be provided; it allows a better standard of staffing and the use of the specialist system; it permits of a greater variety of courses and a more suitable classification of pupils. For these reasons most of the three-year Advanced Divisions act as centres for a number of feeder schools, even in the country districts; and in the towns the tendency has naturally been to establish large Advanced Division Centres—often without primary departments. In many cases secondary and Advanced Division courses are centralised in the same school.

Organisation and Staffing of Advanced Divisions

The newer Advanced Division Centres in the cities need not fear comparison with the secondary schools as far as buildings and equipment are concerned, and their facilities for practical work of varied kinds leave little to be desired; but the standard of equipment and

staffing declines considerably when we reach the smaller centres in the country districts. Shortly after the establishment of the Advanced Divisions the Report of the Committee of Council stated that " the general aim is to staff the Advanced Divisions with teachers as highly qualified as those appointed to the secondary schools " ; and the later reports indicate that this aim has been achieved in the case of the three-year centres, but that in the case of the two-year courses the standard is not so high. It is clear, however, that education committees are aiming at staffing these courses with teachers who have the Teacher's Special or Technical Certificates, or an endorsement under Article 39 of the Training Regulations. In the case of academic subjects the normal requirements for this latter qualification are a double course in the subject at the university and a course in methods and practice of teaching the subject at a Training College.

Where the combination of Advanced Division and secondary courses has been effected, the pupils taking the former have had the advantage of entering a school where the tone and tradition have already been formed ; but in the newer centres, where the pupils usually leave after one, two, or three years, the *esprit d'école* is still in the making.

Standard of Attainment in Advanced Divisions

While there must inevitably be great variation in the level of attainment in these schools, it may be said that the standard aimed at in the full three-year courses is that of the old Intermediate Certificate, i.e. roughly that of pupils who have had three years in one of the traditional secondary schools. From the reports of the inspectors it appears that this is commonly reached, and that the Day School Certificate (Higher) represents as high a standard of attainment as its predecessor.

Articulation of Advanced Divisions with Further Education

It was originally contemplated that, in certain cases, pupils who leave school before the end of an Advanced Division course would be able to complete it in continuation classes. This is provided for in Circular 60 (1923) ; but the few committees who have experimented with the procedure have not found it very satisfactory, and the arrangement is now in force in only a very small percentage of the areas. Many of the Advanced Division pupils, however, continue their education in continuation classes or in Central Institutions, in both of which the possession of a Day School Certificate enables a pupil to enter certain courses at a higher stage than he otherwise would. In one or two areas, too, the successful completion of a Technical Course has become a recognised qualification for an apprenticeship.

WILLIAM MCCLELLAND.

CHAPTER FOURTEEN

SECONDARY EDUCATION IN SCOTLAND: SOME MODERN PROBLEMS AND TENDENCIES

I. Adequacy of the Provision of Secondary Education

HAVING obtained a general view of the system we shall now consider briefly some general problems relating to secondary education with a view to bringing out the lines along which opinion and practice in Scotland are moving; and first we shall raise the question whether she has solved the difficult problem of providing adequate facilities for secondary education in a sparsely populated country. It is a problem on which comparative statistics are of doubtful value, partly because we have no agreed-upon measure of adequacy, in an absolute sense, and partly because the term secondary means different things in different countries. But for our present purpose we shall take secondary education to mean the post-primary courses given in our secondary schools, and we shall measure adequacy in relation to the present demand.

As a practical administrative problem, then, the question takes the form: What is the proportion of children who desire a secondary course, and are capable of profiting by it, but are debarred from such a course through lack of accommodation or inability to pay fees? This is a question to which the Departmental statistics do not provide an answer, but I included it in a questionnaire which I addressed to all the Directors of Education, to whom I am deeply indebted for information on this and many other points. Replying for their own areas, 31 gave the answers "none," or "negligible"; 2 gave the answer "small"; and in no case was the proportion given as "considerable."

At this point it should be mentioned that secondary education in Scotland is mainly free. In about two-thirds of the areas no fees are charged in the secondary departments; in about one-third fees are charged in some secondary schools and not in others; and only in one area are fees charged in all. It may be added, too, that no fees are charged in Advanced Divisions; and that even in those areas which have fee-paying secondary departments a child who is capable of profiting by a secondary course may get a bursary if the circumstances of his parents necessitate this.

It would appear, then, that our provision of secondary education is virtually adequate in relation to the demand; but for comparative purposes it may be well to give a less relative indication of its extent, and to include the Advanced Divisions in our survey.

A general idea of the position may be obtained from the following figures taken from the official statistics for the year 1931–2:

Estimated Population of Scotland	4,883,069
Number of Pupils on Registers of Primary and Preparatory Departments of Code Schools and Secondary Schools at end of School Year . . .	674,481
Number of Pupils on Registers of Post-primary Departments of Code Schools at end of School Year .	72,906
Number of Pupils on Registers of Secondary Departments at end of School Year	83,180

Such slumped figures are, however, of limited value ; and a much fairer estimate may be obtained from Figure I, which shows the position at a glance, and also brings out several other features of the system to which reference will be made later. It is based upon the official statistics of the grant-aided schools (excluding special and side schools) for the end of the school year 1931–2 ; but while we thus omit a few purely private schools, the number of these is so small that the diagram may be fairly taken as representing the complete system. The percentage basis was adopted, partly for the sake of clearness and simplicity, and partly because the age groups in the period covered vary so much in size—the largest being about 101,000 and the smallest about 68,000. It should be added, too, that little importance attaches to the sub-division of the post-primary pupils into Advanced Division and secondary. The unshaded portion includes all pupils in the secondary departments of the secondary schools, but a number of these are following Advanced Division courses.

To complete our survey it is only necessary to give some indication of the direction and rate of our movement, and this may be got from the following table, taken from the Report of the Committee of Council for 1932, which gives the percentages of the total number of pupils who left the grant-aided schools after having had post-primary courses of various lengths :

	1931–2 *Per cent.*	1930–1 *Per cent.*	1926–7 *Per cent.*
(*a*) Left school after having attended a post-primary course for not less than two sessions . .	48·7	44·2	36·4
(*b*) For less than two sessions but not less than one .	28·0	30·2	30·5
(*c*) For less than one session, or not at all . .	23·3	25·6	33·1

Reasons for Scotland's Success

If we may assume, then, that Scotland has, in spite of the difficulties arising from the distribution of her population, made good progress towards the solution of this problem, we may look for a moment at the factors which have contributed to her success and the methods she has adopted. Of the former, perhaps the most important has been the length and quality of her educational tradition. It is not merely that we started very early in the task, and

that the system has been growing up for centuries in a natural way in response to local needs and maintained by local interest—though this has helped, both in the number of schools and in their proper geographical placing. Even more important has been the conviction, to which Scotland has always clung, that every child has a right to a secondary education if he has the ability to profit by it; and also the high valuation of education which we find among all classes, poor as well as rich. These have operated as forces pushing towards the maintenance of an open educational road for the gifted, and the fact that the later parts of this road have been smoothed by accessible university education, and, in later years, by the payment of university fees by the Carnegie Trust, has acted as an inducement to face the difficulties of the middle portion. Of great importance, too, has been the " end-on " conception of secondary education. Had our system been based on the " parallel " idea it is difficult to see how the problem could have been solved at all, for the main methods of solution which have been adopted could be used only when we have a common foundation of primary education ending at a not too early age. Co-education, the fact that we have had practically no " religious difficulty," that we early attained unity of control of primary and secondary education, and that we have been fortunate in the leaders who have moulded the national policy have also contributed materially to the outcome.

Thinly Populated Areas

In dealing with the methods by which the problem has been solved, we may limit our consideration to the special difficulties of the thinly populated areas. In the cities and populous districts the problem is relatively an easy one in a system where there is perfect freedom of transfer from any type of primary department to any type of post-primary course at the qualifying stage. This has rendered possible a successful policy of centralisation on a basis of feeder schools; but in the outlying districts serious difficulties arise in view of the large distances between the child's home and the nearest centre. Yet these are the very children whose neglect would be contrary to the whole Scottish tradition, and their needs have been met by various expedients, which include:

(1) Provision of motor transport to the centres.
(2) Payment of travelling expenses.
(3) Payment of maintenance allowances to meet the cost of lodgings.
(4) Provision of hostels.

It can be readily understood that, when children may have to travel considerable distances to a centre or even to reside away from home, it is convenient to have a qualifying age which is not too low; but even with our present age of 12 *plus* many parents are unwilling to allow their children to travel or reside from home so early. In some cases this difficulty is met by the three-year secondary schools

from which pupils can transfer at about 15 to finish the secondary course at a more distant centre. In other cases there is an arrangement whereby pupils can take one or two years of the post-primary course at their home school. In still other cases there are schools so remote that none of the above methods can be adopted; and in these the ancient Parish School procedure is maintained. The rural schoolmaster coaches up his brilliant pupil, presents him for the Leaving Certificate, and sends him direct to the university.

In the case of Advanced Divisions centralisation in the rural districts has not been pushed so far—the difficulty of the practical instruction being overcome by the use of visiting specialists or a method of centralisation for practical subjects only.

II. Substitutes for the Qualifying Examination

In Circular 44 it was pointed out that, while the Qualifying Examination conducted by H.M. Inspectors was to disappear in 1922, the qualifying stage must "continue to mark something of an epoch in the school career of every pupil"; and authorities were to replace the old examination by "some arrangement under which those who have taught and those who are to teach particular individuals shall combine in an endeavour to estimate the potentialities of the material to be handled."

Up to this point the Qualifying Examination represented a definite standard of scholastic attainment, and its functions were to attest the satisfactory completion of the primary stage and fitness to enter upon a post-primary course. It was, in effect, a barrier placed in the way of post-primary education; and perhaps the most important outcome of a decade of experimentation with substitutes has been a progressive realisation that a barrier should not be there at all.

The promotion schemes of the various areas take very diverse forms. Slightly less than half retain a uniform written examination, the subjects being English and arithmetic, with the addition, in a proportion of cases, of history and geography. Sometimes the papers are set by an examination board, sometimes by the Director of Education, external examiners or head teachers. Even in these areas considerable weight is given to the school records of the pupils, and in the cases where the uniform examination has been abandoned these are the main basis of the decision. Formal oral examination is uncommon, but twelve areas are making use of intelligence tests, and five areas of standardised scholastic tests.

While in about fourteen areas the passing of the qualifying test is all that is demanded for entrance upon a secondary course, the majority of authorities place a higher hurdle before the door of these courses. In eight areas the same test is used for this purpose, but a higher mark is required. In eight other areas there is a special examination—usually called a "control" examination—for entry to the secondary departments; and in a number of cases the secondary schools have their own entrance tests. As a rule, con-

sultation between the receiving and transmitting headmasters is provided for, either in all cases or in doubtful cases.

Even from this summary account of the substitutes it will be clear that the qualifying test has lost some of its character as a barrier, and is taking on its true function—which is prognostic. It should enable us to guide the pupil into the form of post-primary course for which he is best suited.

To the movement in this direction several influences have contributed. Even conceived as a barrier, we had come to look askance at the standard set, and many of the inspectors expressed the opinion that it was too high. The rise in status of the newer forms of post-primary course then began to raise doubts as to whether it was the right kind of barrier—whether it was fair to place a " literary " obstacle in the way of a " practical " course. And not least in importance was the realisation that most of the non-qualifiers were wasting their time in their last years in the senior division.

III. The " Clean Cut "

The Report of the Hadow Committee on *The Education of the Adolescent* (1926) therefore impinged upon a movement of thought which had already started in Scotland. In Circular 44 (1921) we read : " Nor will it be advisable to require that those who are below the average in ordinary school subjects shall necessarily remain in the " qualifying " class until the obstacle has been surmounted. In the larger schools, at least, there will always be a not inconsiderable proportion whose tastes are anything but bookish, and whose interest can be more effectively awakened through the hand than through the head. . . . To require that boys and girls shall spend two or three years of their lives in striving after the unattainable is as futile from the point of view of the State as it is cruel from the point of view of the individual." And in the 1923 Code there is the following provision : " As a rule, no child should be promoted to a higher division who has not satisfactorily completed the work of the division below, but education authorities in all cases may, and in the case of children over 13 should, make special provision for the instruction of children who in the course of normal promotion have failed by more than a year to reach the division appropriate to their age." If, then, we take into account the fact that our normal age of transfer is 12 *plus*, and the Hadow Committee's reservation that the age of transfer is not to be interpreted in a " precise chronological sense," we may claim that their doctrine of the clean cut had cast its shadow several years before in the Scottish regulations.

A clean cut that is really clean—in the sense that all pupils would be transferred at a definite chronological age—does not find much favour in Scotland at the moment. For one thing, there is the temporary practical difficulty that the requisite post-primary courses are not yet in being. But apart from this, there is a fairly general feeling that if a child—particularly one whose retardation is

of the preventable type—could pass the qualifying test, it is better to give him a chance to do so before proceeding to a post-primary course, provided he is not kept at the hurdle too long. The Research Council, also, point out that if all the pupils in the ordinary schools were promoted at 12, provision would have to be made in the post-primary departments for a few pupils with an educational age of 8 years, and for almost 15 per cent. with an educational age of less than 10½ years. On the other hand, there appears to be fairly substantial agreement that the age of 13 is too high for the latest transfers. From the replies to my questionnaire I find that the prevailing view on the whole question is that the brighter pupils should be transferred not earlier than 11 years and all pupils not later than 12½.

Such is the movement of opinion on the question of the clean cut, and the practice of the education committees is following—but a good deal behind, as will be clear from Figure I. In several districts the idea is being put into operation almost in full at 12; in some areas all unqualified pupils of 12 or over are encouraged to go to Advanced Division courses; in others unqualified pupils are transferred at 13. Yet in many cases these non-qualifiers still remain in the senior division till 14, taking a course which may or may not make some provision for special work fitted to their needs.

IV. Normal Age of Transfer

An obvious difficulty in a system where the latest age for transfer is high is that many pupils will have a very short post-primary course, and this has raised the question whether we should not reduce our normal qualifying age, say to 11 *plus*. On this point opinion is divided. Those who favour a reduction usually propose to effect it by a drastic application of the doctrine of "minimum essentials" to the primary course. On the other hand, many emphasise that 12 is an early enough age at which to ask a pupil to burn his boats; and it has already been mentioned that a low qualifying age does not suit a country where children may have to travel long distances to a centre. The majority of the Directors of Education and other educationists who have given me their views on this point favour 12 as the normal age for the break; but a minority would prefer a reduction to 11 *plus*. Very few are in favour of 11 or 12 *plus*.

V. Guidance as to Choice of Course

The fact that the tests at the qualifying stage are becoming prognostic in function is reflected in the arrangements that are being made for utilising the information to guide pupils into suitable courses. Such guidance is normally given by the headmasters and teachers, but in thirteen areas more elaborate arrangements are made. In some cases these take the form of a letter or leaflet to parents, giving full information as to the courses available and general advice on selection; in others, special interviewing meetings

with parents and children are arranged. One of the most interesting schemes, however, is that adopted in Dumbarton, where all pupils take the same general course in their first term in the post-primary departments, at the end of which a letter is sent to each parent enclosing a class report, and a recommendation as to the further course which best meets the child's needs. These recommendations are based on the primary school record, the work of the preparatory term, and the length of time the parent proposes to keep the child at school. Full particulars of the various courses are given, and the parent is invited to consult with the head teacher if he has any doubt as to the soundness of the recommendation.

VI. "Omnibus" Schools or Specialised Schools

The rise of the Advanced Divisions raised a problem of school organisation on which there is considerable divergence both in opinion and in practice—the problem whether the better arrangement is to have "Omnibus" schools where all types of post-primary course run as parallel courses in the same building, or whether we should have separate schools for the different courses. In particular, authorities have had to decide whether the secondary and Advanced Division courses should be conducted in the same school or in separate schools.

On this point the Advisory Council to the Department were of opinion that parallel courses within the same building would be the more suitable arrangement for the Intermediate Schools with a view to facilitating transfers, but that in large towns "exceptions to this rule might sometimes be found desirable." On the other hand, the Scottish Education Reform Committee, under the Chairmanship of Dr. Morgan, favoured specialisation in function; and Circular 44 stated that proper attention to the needs of the non-secondary pupil implied "an entirely separate organisation."

Strong arguments have been brought forward on both sides. The "Omnibus" arrangement is certainly the one most in harmony with the democratic tradition of Scottish education, for segregation in different schools tends towards class distinctions, both social and intellectual. In the specialised school we lose the undoubted educational and social advantages that come from the free mixing of varied types of pupil, with different interests, tastes and abilities. On the other hand, many fear that in the "Omnibus" school the Advanced Division courses will be even more subject to the dominance of the academic tradition of the secondary schools, a rather two-edged argument; and it is claimed that a degree of specialisation in the aim of an institution simplifies the problem of finding a suitable headmaster and conduces to ease of organisation and general efficiency.

In the main, however, the arrangements adopted are the result rather of administrative expediency than of any deep-seated convictions as to the relative educational value of the two systems. About one-third of our secondary schools have no specially recog-

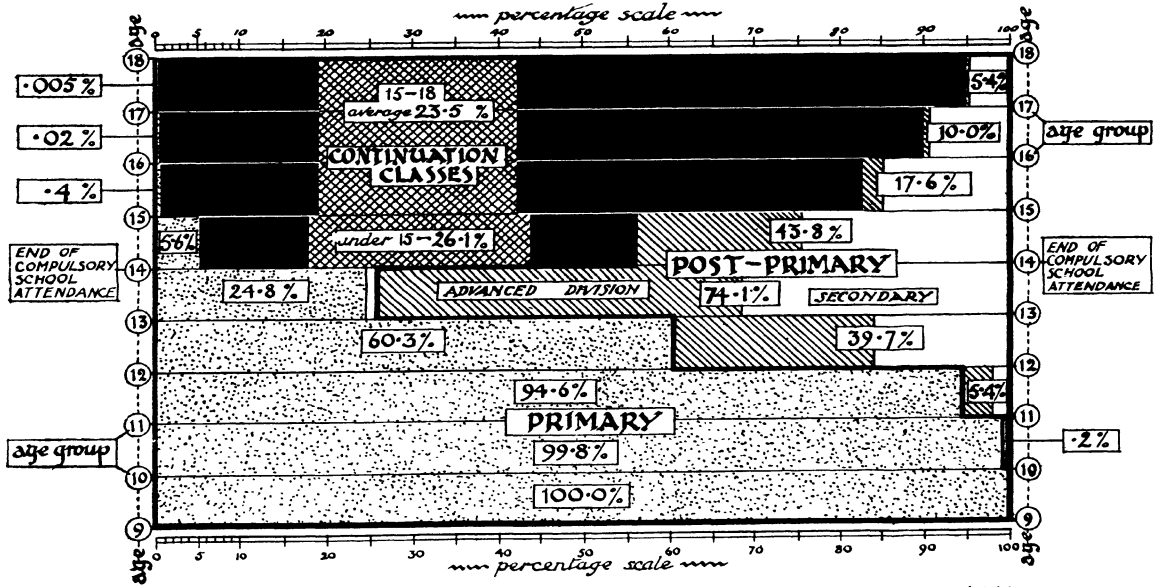


Fig. 1 — PROVISION OF POST-PRIMARY EDUCATION IN SCOTLAND

The percentages are of the age groups and are accurately drawn to scale

nised Advanced Division courses, though many of these present pupils for the Day School Certificate ; about one-third have recognised three-year Advanced Division courses ; and about one-third are of the " Ominibus " type.

While we are thus acquiring experience of both systems, the reports one hears are so conflicting that it would be premature to attempt to assess its purport or to hazard a guess as to the direction in which we shall ultimately move. In those areas where the " Omnibus " type is being intentionally developed, stress is laid on the beneficial effect on the prestige of the Advanced Division courses —indeed, one Director of Education goes farther. He says that the change to the " Omnibus " arrangement " has improved the secondary classes, and the technical classes have now a prestige in the eyes of parents that they did not have a few years ago." The latter effect is, of course, to be expected. The Advanced Division child has a guarantee that he is not going to an inferior institution and that he will probably be taught by the same teachers as the children taking the secondary courses. Emphasis is also laid on the fact that more advantage is taken of the opportunity to transfer from one course to another in such schools.

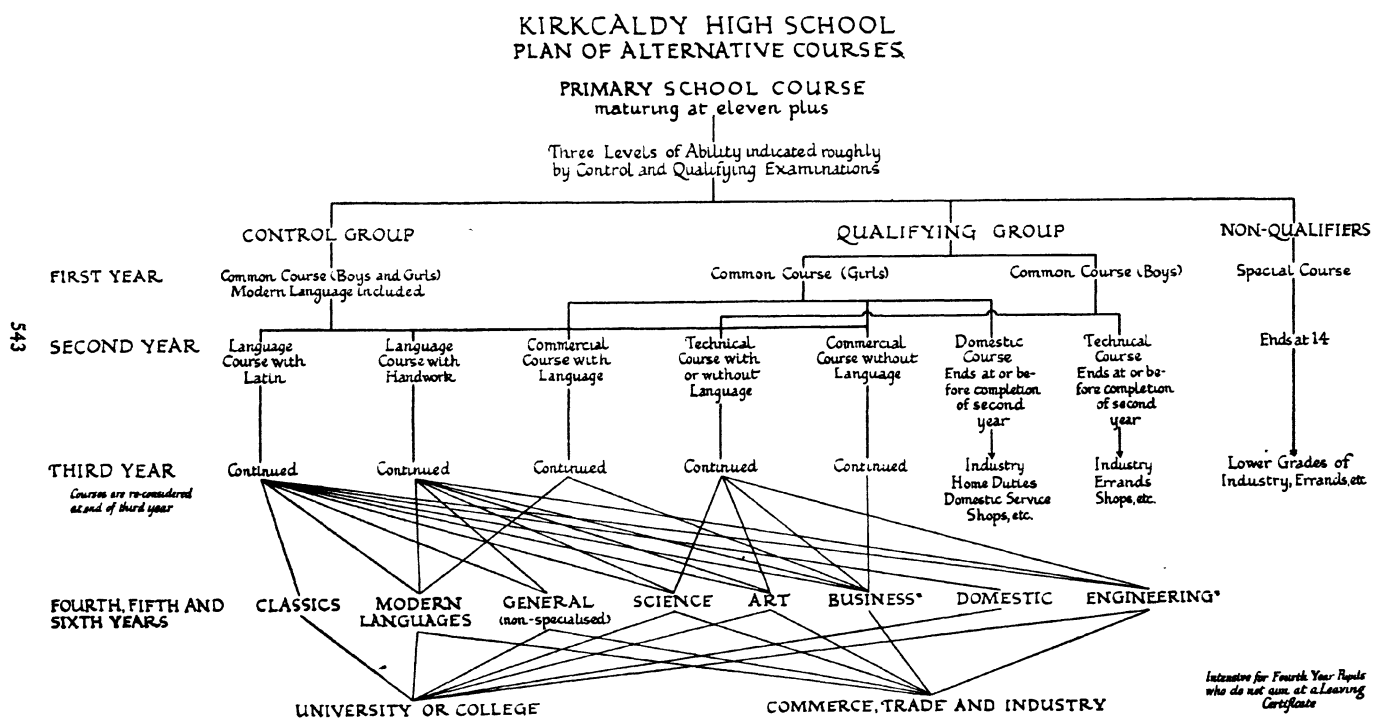
Kirkcaldy High School

One of the most interesting " Omnibus " schools in Scotland is the Kirkcaldy High School, whose general scheme of organisation is shown in Figure II, for which I am indebted to Mr. Gregor MacGregor, Director of Education for Fife. While it can scarcely be regarded as typical it reflects the flexibility of Scottish secondary education and forms a striking comparison with, say, a French *lycée*. The flexibility is, in fact, even greater than the plan can show, for under each of the eight general course types for the Leaving Certificate there are sub-varieties, and the pupil has about twenty options. The intensive fourth-year courses in business and engineering are worthy of special note, as they are an attempt to meet a problem on which we have not, so far, touched. In his notes on the scheme, Mr. MacGregor points out that the fourth year pupils are of two kinds : (1) those who have definitely decided to proceed to the Leaving Certificate, and (2) those who have no special plans, but " wait for a job to turn up." It is for the latter type—particularly those who definitely intend to stay for the fourth year only—that the intensive fourth-year courses are most useful. For a fuller account of this important school, the reader is referred to an article entitled " A Scottish Non-selective Post-primary School," by the Headmaster, Mr. Frank M. Earle (*International Education Review*, 1932/33 : 1).

VII. Transference from One Post-primary Course to Another

The fact that a good deal remains to be done in the development of prognostic methods at the qualifying stage renders desirable some

FIGURE II—ORGANISATION OF A SCOTTISH "OMNIBUS" SCHOOL



provision for freedom of later transfer ; but in Scotland this problem offers no serious difficulty. As a rule it is easier to change from than to a secondary course ; and, as we shall see, the commoner error is the choice of a secondary course by pupils who would be better in an Advanced Division. But even in the case where an Advanced Division pupil desires to change to a secondary course, the regulations for the Leaving Certificate are so elastic that he can usually avoid dislocation by the proper choice of subjects.

Most authorities, however, make special provision for such transfers, of which the most popular is an arrangement whereby there is close similarity in the schemes of work of all post-primary courses in the first year, or even in the first two years. This is an arrangement which was recommended by the Advisory Council, and it obtains in the majority of the areas. In several others, applications for transfer are dealt with by the Director of Education, who may arrange for special tuition to bring the child forward in subjects which were omitted from the previous course. The Dumbarton scheme, with its regrading after a preparatory term, is of interest in this connection ; and, as we have seen, the problem is much easier in the " Omnibus " schools.

VIII. Leakage in the Secondary Departments

In discussing the adequacy of the provision of secondary education, little stress was laid upon the total number of pupils in the secondary departments, for this figure gives an exaggerated idea of the effectiveness of the system. Figure I tells a somewhat different story, in that it discloses one of the most disturbing features of these departments—the rapid decline in numbers in the higher classes, and the large number of uncompleted courses. The actual figures for the year ended July 31st, 1932, are as follows :

Number of pupils who left the Secondary Departments :

Without completing one year	*After completing—*					
	the 1st but not the 2nd year	*the 2nd but not the 3rd year*	*the 3rd but not the 4th year*	*the 4th but not the 5th year*	*the 5th but not the 6th year*	*the 6th or a subsequent year*
1,858	6,670	7,050	5,346	1,654	1,918	2,292

In interpreting these figures it must, of course, be borne in mind that the full course can be completed in five years, and that part of the early leakage is due to pupils who leave with a Day School Certificate. Yet, even with these reservations, the number of unfinished courses is sufficient to demand serious attention.

To some extent leakage is inevitable. It is due, in part, to such factors as change in family circumstances or offer of a suitable job ; but it is probably also to be attributed to the fact that many pupils find the course they are following quite unsuited to their tastes and abilities. Even within the secondary school itself this might

be remedied if greater advantage were taken of the elasticity of the regulations, and more pupils took courses of a more modern type ; but the feeling is prevalent that the main line of attack should be a diversion of part of the secondary inflow into the Advanced Division courses.

IX. Prestige of the Advanced Divisions

Some would cure this influx of unsuitable material into the secondary courses by a drastic stiffening of the standard for entrance —a solution which will be well worthy of consideration when someone devises a testing procedure that will do equal justice to the boys who will specialise in classics and those who will specialise in music. Others would tackle it by doing everything possible to raise the standing of the other post-primary courses. This is undoubtedly sound, but it has its limitations ; for the high prestige of the secondary courses is not wholly due to educational prejudices. The fact that the road to the professions lies through a full secondary course will always give these courses a higher status in the eyes of parents and pupils than the shorter Advanced Division courses which normally lead to lower vocations. And no matter how general the knowledge of the distribution of intelligence may become, it will always be a matter of difficulty to convince any particular parent that *his* boy has not sufficient ability to take that road. It is difficult even to anticipate that all the Advanced Division courses will come to have the same prestige. Even if the " clean cut " brought them to the same length, and even with our idea that hewing of wood and drawing of water should not form the school course of the future hewer of wood and drawer of water, it is difficult to see how a course suited to the child at the lower end of the intelligence distribution could have the same intellectual prestige as that suited to the child at the top.

Despite these limitations much can and should be done. In actual fact the Advanced Divisions have not the status they should have relative to the secondary courses. Their gain in prestige has been disappointingly slow, and the effect in checking the flow into the secondary courses has not been very appreciable—a state of affairs for which the Department has a measure of responsibility. It is generally believed that it made a serious blunder in Circular 44 in using the term " non-secondary " to describe courses not of the traditional secondary type ; that it did not improve matters by the introduction of the name " Advanced Division " ; and that these newer forms of post-primary education will always have a stigma of inferiority until all departments giving education of a post-primary type are called secondary and are administered under the same regulations.

It is to be hoped that some change on these lines will be made ; but there is ground for hope that the improvement of the staff and equipment of the Advanced Divisions, the enrichment of their

courses, the increased recognition of the Day School Certificate by employers, and the development of " Omnibus " schools, will progressively, and more rapidly, raise the standing of these newer courses.

X. Research and Experimentation

While no sweeping changes in secondary-school methods are being made in Scotland and no new " plans " or " systems " have been evolved, it would be a mistake to think that Scottish teachers are not interested in such movements as those towards the use of purposeful activities, the individualisation of education and the cultivation of interests rather than the attainment of a hard mechanical proficiency. Experimentation is going on, but it is difficult to particularise, largely because it is cautious, eclectic and carried on without the ostentation that often goes with onesidedness and faddism. These graduates and honours graduates who are entering our secondary schools and Advanced Divisions are all familiar with the newer doctrines and methods and are quite willing to experiment with them and incorporate into their practice such elements as they think valuable. If we err on the side of conservatism in this respect, the reason probably lies in the fact that, in a system where success is frequently measured by the percentage of passes in the Leaving Certificate examinations, experimentation has to be carried on with a measure of discretion.

Perhaps the best testimony to the Scottish interest in this side of educational work is the establishment five years ago of the Scottish Council for Research in Education. This organisation is representative of all the main bodies concerned in education, and it is at present studying various problems bearing upon the work of the post-primary departments.

Such are some of the main problems relating to secondary education which are occupying the attention of Scottish educationists at the moment ; but if the reader will turn once more to Figure I he will find, in the black portion of the diagram, the most pressing problem of post-primary education in the future.

WILLIAM MCCLELLAND.

CHAPTER FIFTEEN

CANADA: SCHOOL SYSTEMS OF THE PROVINCES, WITH SPECIAL REFERENCE TO SECONDARY EDUCATION

NOVA SCOTIA

Population (1931): *Ages* 7–14, 91,033; *Ages* 15–17, 32,524

Rural, 281,192; *Urban*, 231,654

SCHOOL Boards must provide accommodation for all residents over 5 years of age who wish to attend. Regular attendance is compulsory in rural schools for ages 7 to 14, in town and city schools for ages 6 to 16. Length of the school year is 200 teaching days. There is commonly a vacation of eight weeks in July–August, but in some rural schools it is taken in midwinter, January–February.

The provincial-school system of Nova Scotia enrolled 116,041 pupils in 1932. The work of the schools is divided into twelve grades, each of which constitutes a year's work for the average child. The first eight grades are considered elementary; the last four, secondary. Grade XI represents matriculation to the universities; Grade XII is generally equivalent to first year at a university, and represents a post-graduate high-school year for prospective teachers who are looking forward to a better grade of teaching certificate than that obtainable with Grade XI only as an academic basis. It is also frequently taken for first-year university credit. Less than a quarter of Grade XI students go on to Grade XII.

The total enrolment consists of 100,815 in elementary grades (which may be considered in relation to the 91,033 pupils at ages 7 to 14 in the census of the preceding year), and 15,226 in secondary grades. Of the secondary pupils, 7,076 are in rural and small village schools, with girls outnumbering boys almost two to one. A majority of the rural boys are in Grade IX, the first high-school grade. Only a fourth of them remain up to Grade XI, whereas nearly half of the girls do. In the town and city secondary schools the girls are not much more numerous than the boys. Over half of these urban Grade IX boys stay to Grade XI, and about two-thirds of the girls.

The number of elementary pupils is practically the same now as ten years ago; the secondary pupils have increased nearly 40 per cent. Though a smaller increase than in the newer provinces, it has called for some adjustments that have been made, and others that it is as yet only hoped to make. The number of schools receiving provincial grants for high-school work was increased in 1930 from 18 to 48, and the grants more than trebled. As yet the high schools are all of the academic type, except for a few commercial classes. The two largest cities, it seems, had practically decided to erect new technical high schools in 1929–30, but financial conditions have caused the projects to be indefinitely postponed.

A definite move was made in 1931 towards a break with the traditional 8–4, elementary-secondary grade system, as is testified by the following quotation from the provincial Superintendent's Annual Report: "By legislation last session the Department of Education was enabled for the first time to provide grants in aid, payable on the same basis as the high-school grants, to any school board making special provision for the education of pupils in the period of adolescence, broadly coinciding with Grades VII, VIII and IX, of the public-school system. This is in line with progressive education in America and abroad, whether the particular type of school thus recognised is termed post-primary, middle school, or junior high school. While it is not to be expected that many communities can avail themselves of the grant at the moment, it is recommended that urban school boards, having

before them the problem of increased accommodation for pupils or the necessity of a new building programme, should look into the possibility of organising on the plan of the junior and senior high school, now that substantial grants are available for this purpose."

The objective in making available the grants described in the preceding paragraph is apparently the junior high-school organisation, as it is known in the United States and, more recently, in other Canadian provinces, notably Manitoba and British Columbia. In short, it is the replacement of the 8–4 system by the 6–3–3. Another type of grant made available at the same time seems to have, rather, British practice in view. Grants are also to be made available *to school sections instituting separate classes for pupils not intending to continue at school beyond the common school age, or to proceed to the more academic studies of the high school as at present organised.* " To those school boards providing special classes in Grades VII, VIII and IX with a ' bias ' towards vocational studies, a special grant of $250 will be paid to each class thus provided. In this way pupils who otherwise drop out in the earlier stages will be encouraged to get the kind of training best suited to their particular aptitudes and interests. Already such pre-vocational classes are in operation in New Glasgow."

The establishment of these two types of grants in Nova Scotia, for two types of schools with a distinct functional difference, stands as one of the few tangible evidences that there is a clear distinction in the minds of Canadian educational administrators between the two types of schools represented by the United States junior high school and the English central school.

University attendance has increased from 1,707 to 2,498 in the period 1922–32, a rate very much like the increase in secondary-grade pupils. There are three universities: Acadia, Dalhousie and St. Francis Xavier (R.C.).

NEW BRUNSWICK

Population (1931): *Ages* 7–14, 77,055; *Ages* 15–17, 26,279
Rural, 279,279; *Urban*, 128,940

School Boards must provide accommodation for residents between ages 6 and 20; others may attend if there is accommodation. In the cities of Saint John, Fredericton, Chatham and Newcastle, the ages of compulsory attendance are 6 to 14; in other cities and towns, 120 days per year are usually required between the ages of 6 and 16, except where the pupil is 12 years of age, and has reached Grade VII; in other districts that have adopted compulsory attendance, 80 days annually are compulsory between ages 7 and 12. An eight-weeks' summer vacation begins July 1st.

The 1932 attendance in the school system of the provincial Department of Education was 87,971, of whom fewer than 6,000 were reported in secondary grades. The latter figure is generally considered low, for grading in the rural schools of this province tends to be conservative. In practice there are only three secondary grades above the eight elementary grades, except in Saint John, where a Grade XII class is conducted.

In addition to the schools of the Department of Education there has been for fourteen years a number of secondary technical schools administered by a provincial Vocational Education Board. These seven schools had an enrolment of 1,469 to be added to the 6,000 secondary pupils in academic classes. The courses of these pupils were classified as 490 commercial, 172 industrial, 115 home economics, 28 agriculture, 62 technical, 20 pulp and paper, 22 art, 506 pre-vocational.

In the last ten years the elementary enrolment in New Brunswick schools has increased about 10 per cent.; the secondary enrolment is shown to have very nearly doubled, though a part of this may be due to increasing precision of grading. However, there is the additional increase in technical secondary pupils (from 78 to 1,469) to set against the possible difference in grading, so the combined secondary increase must be somewhere in the neighbourhood of 100 per cent. in the ten years. In this period the technical high schools

have increased in number from one to seven and take care of about 1,400 additional pupils, whereas the academic schools have received an increase of about 2,500.

University attendance has increased in similar proportions—from fewer than 600 in 1922, to 1,294 in 1932. About 300 of the latter figure represent summer courses in university subjects for teachers, inaugurated within the decade. There are three universities: Mount Allison, New Brunswick and St. Joseph's (R.C.).

PRINCE EDWARD ISLAND

Population (1931): *Ages* 7–14, 15,191; *Ages* 15–17, 5,408

Rural, 67,653; *Urban*, 20,385

Ages of free admission: resident children from the 6th to the 16th year of their age, older children if there is accommodation. Attendance is compulsory from ages 7 to 13. In Charlottetown and Summerside the mid-summer vacation is of nine weeks' duration, beginning July 1st; elsewhere generally six weeks, with two additional weeks in October to enable children to assist with the potato harvest.

Prince Edward Island, like New Brunswick, is predominantly rural. Of the island's 12,721 pupils in public schools, 7,322 are in one-room schools. In these, as well as the larger schools, there are, or may be, ten grades, on the completion of which the examination for admission to Prince of Wales College is written. This might be described as a provincial institution fulfilling the dual function of a teacher-training school and a junior college. It provides a course of one, two or three years. By reason of its affiliation with the Maritime Universities and McGill its graduates are admitted to their Arts courses without examination. It has 380 students, and about 200 of its graduates are enrolled in universities (of other provinces) each year.

By reason of the island's population showing no increase for many years, and previous to that a decline, its problem of additional accommodation for an increasing number of advanced pupils is not as difficult as in most of the other provinces. There are 1,867 pupils in Grades IX and X. Any increase of these in the last decade has been compensated by a decrease in elementary pupils.

QUEBEC

Population (1931): *Ages* 7–14, 525,940; *Ages* 15–17, 181,526

Rural, 1,060,649; *Urban*, 1,813,606

Roman Catholic, 2,463,160; *Non-Roman Catholic*, 411,095

The ages of free admission to elementary schools are usually 5 to 16. A fee is charged except where abolished by the municipality, and children 7 to 14 have to pay this fee whether they attend school or not (there are no statutory laws for compulsory attendance), but no child of this age is excluded from school through inability to pay the fee. Schools close for the months of July and August.

There are two educational systems in Quebec, different in structure and administration, and, in the main, in language also, from the nursery school to the university (a few technical schools excepted). One is the Roman Catholic, and mainly French-language system; the other is called the Protestant, and is mainly an English-language system, but in practice includes all who are not Roman Catholics, including a large Jewish community in Montreal.

Protestant Schools.—The "Protestant" course is one of eleven grades, seven of which are considered elementary and four secondary. With a total

of 76,973 pupils, of whom 743 were unclassified, there were 11,158 recorded in the four high-school grades in 1931. Of the total enrolment, about half are in Montreal and district. The manner in which the other half are scattered over the province, combined with the fact that there are everywhere schools of the two denominations even at the high-school level, makes the problem of high-school facilities, outside the largest towns, especially difficult, as compared with other provinces, for nowhere else does the denominational level extend above the elementary grades. One result is that there are proportionately more schools being consolidated (i.e. amalgamations of small districts with transportation provided for pupils) in Protestant Quebec than in any other province.

As compared with a ten-year increase of 16 per cent. in the first seven grades there has been an increase of 76 per cent. in the upper four. Though there seems to be no complete record, some of the pupils of high-school grade are taking commercial, rather than strictly academic courses. There were 600 pupils in the Commercial High School of Montreal. The city technical schools at Montreal, and three other cities had English-speaking sections with 244 boys in attendance.

Roman Catholic Schools.—The general schools of the majority denomination recorded 522,969 pupils in 1931. The first seven years, preparatory and elementary years, account for 487,466 of these, the post-elementary grades for 26,207 (and there are 9,296 unclassified). The first four years show a comparatively uniform number of students, about 91,000 each. After the fourth year the drop is rather rapid—to 62,000 in the fifth year, 38,000 in the sixth, 23,000 in the seventh. Thus in the final elementary year there seem to be something like one-fourth of the beginners still in school (though a few more have transferred to classical schools by this time), whereas in the other provinces, and in the Quebec Protestant schools, the proportion is about two-thirds. Despite the absence of a compulsory-attendance law such as other provinces have, the Quebec Catholic children attend with first-rate regularity while they are at school, but they leave school at an earlier age than the children of the other Canadian provinces. In the last few years an attempt has been made to introduce a regular examination at the end of the last elementary year, on the successful passing of which a certificate of elementary studies would be given, with a view to encouraging children to remain in school long enough to receive it. This would be an examination comparable in difficulty presumably to the entrance to high-school examination which other provinces have, but the like of which the French system of Quebec has never previously used. A start was made in 1932, when some districts gave the examination a trial, 5,685 pupils out of a total of 23,000 having taken it.

Until 1929 there were only two post-elementary years in the general schools. At that time three more were added, making five, to prepare pupils for admission to some of the higher technical schools, for business positions, or simply to provide a better general education for those able to take advantage of it. All these five years have a strong tendency to vocational preparation. Apart from certain general subjects which all take in common, there are four groups of vocational subjects (agricultural, commercial, industrial, household science), one of which must be followed by each pupil.

At the end of the elementary course children are also ready for admission to the normal schools, the technical schools, the classical colleges, the preparatory schools of theological seminaries and religious teaching orders, as well as to the post-elementary course in the general schools referred to in the preceding paragraph. Thus the following must be added to the 26,000 mentioned: about 1,800 girls and 200 boys in the two- or three-year course of the normal schools for lay teachers; about 500 in the normal schools of teaching brothers, and an unknown but certainly considerable number of girls in the novitiates of teaching sisters; about 800 boys under the age of 18 in the classical schools of religious orders preparing for theological studies; 8,400 boys under the age of 18 in classical colleges, which are, in the narrow sense of the term, the secondary schools; a number of girls in convent

schools, many of them called household science schools, affiliated to the universities, but the number not included in the figure of 26,000 for general schools does not seem to be large; between 2,000 and 3,000 in purely technical schools for boys, including a forest rangers' school, an agricultural school, and a dairy school, to which might be added two schools of the graphic arts.

The *collèges classiques*, or secondary schools proper, are all residential schools conducted by religious orders. Their regular course requires eight years, though a preparatory year (or more) is given in some, and almost half of them offer a commercial course of three years parallel to the first three years of the classical course. The average age of admission to the classical course is 12 years. Completion of the course is marked by the baccalaureate from the Université de Montréal, or the Université Laval, to one or the other of which all the colleges are affiliated. This degree is prerequisite to admission to all professional courses at the universities. There is only one such college for girls as compared with twenty-seven for boys, and girls do not enter the professions of medicine, pharmacy, law, etc., as do the girls of the English communities in Canada. As an institution these Quebec colleges do not appear to be growing in attendance like the high schools of other provinces. Abbé Maheux, of Laval University, writing in *L'Enseignement secondaire au Canada*, of May 1933, shows that the proportion of the province's population in attendance at the colleges is exactly the same in 1931 as in 1891.

There are four universities: McGill, Bishop's College, and Laval and Montreal (R.C.).

ONTARIO

Population (1931): *Ages* 7–14, 520,229; *Ages* 14–17, 192,281

Rural, 1,335,691; *Urban*, 2,095,992

The elementary schools are free to all residents. Children 8 to 14 must attend full time; children 5 to 8 must attend full time if they are enrolled. Adolescents 14 to 16 who have not attained university-matriculation standing must attend full time, unless exempted on the plea of circumstances compelling them to go to work, in which case they must attend part-time courses 400 hours a year where provided; all urban municipalities over 5,000 in population are required to provide part-time courses. The midsummer vacation is of two months.

In Ontario the provincial elementary schools are not administered by the same local boards as are the secondary schools; the statistical year of the former ends in December, that of the latter in June. This probably tends to make the year's elementary-school enrolment somewhat high as compared with the secondary-school enrolment which is shown for the natural school year. The elementary enrolment would be comparable if it were possible to subtract those who left the schools in the first term of the year under examination, and add those who started within the first term of the following year. Moreover, the enrolment recorded for the high schools in the last two years has been that of the last school day in May, not the number who attended at any time during the year, as previously, and as is still done in other provinces. This, of course, tends to make the high-school enrolment appear lower than it should, for comparability. But with these precautions the following enrolments may be given: elementary schools (public and separate), 658,535; academic secondary schools (collegiate institutes, high schools, and continuation schools), 68,807; vocational and technical high schools, 32,695 in day courses. Another comparison that may serve as a check on the proportions shown as secondary is the elementary enrolment of the last school day in May (though this is of necessity for May in the year before that for which the secondary numbers are given). It is 560,446, but on account of it being for the preceding year, and the attendance of any single day in these schools tending to be a lower proportion of the year's enrolment than is the case in secondary schools, it is too low for comparison. The most that can be said is that the figure to be compared with 101,502 in

secondary schools is somewhere between 560,446 and 658,535 for elementary. Moreover, there are 6,618 pupils in approved secondary classes included in the elementary schools, and a further number, probably nearly as great, in classes not officially approved.

In the ten years just past the secondary enrolment in Ontario has substantially more than doubled, as compared with a very moderate increase in elementary pupils. To meet this situation the technical high school has been more generally adopted in Ontario than elsewhere, and from a few experimental schools in 1919, they increased with sufficient rapidity to take care of about half the secondary increase of the decade. Some 15,000 of the 32,695 in these schools were in the commercial course, after which followed in popularity, shop-work, drafting and art, domestic science, printing, etc.

The length of the elementary course in Ontario varies as between districts. Sometimes it is a seven-year course, sometimes eight. In either case there has been the examination at the end of it, admitting children to academic or technical high schools, and not until the Annual Report of the Department of Education for 1931 has any official step been taken with a view to altering this division in favour of a break at 11 years. This Report, however, commends to the attention of school boards the organisation of " intermediate schools," adding that " this type of elementary school has been tried with advantage both in Great Britain and in the United States." Presumably the schools referred to are the " central schools," and the " junior high schools," though there would probably not be many in Great Britain who would agree to having the two considered one " type of school." In fact, a common starting-point in the " break at 11 " does seem scarcely sufficient basis for failing to distinguish between one type of school intended for the completion of children's education, and another that is intended to serve as an intermediate link between the lower elementary and the senior high school years.

Yet this lack of distinction, if not confusion, is found not only in the Departmental Report, but in the minds of local school administrators. The January, 1933, number of the *Canadian School Journal* carries some articles on the idea of the " Intermediate Schools " proposed for Ontario, in which one city superintendent writes : " Educational authorities in England use the Central School. This type of school seems to be more adapted to Ontario methods than the Junior High School of the American States. The name Intermediate School would more fittingly describe its position in our system than the name Central. An Intermediate School would be a connecting link between the present Elementary School and the Secondary." In the same journal the City Superintendent for Kitchener, however, foresees in the proposed new type of school something nearer the English variety : " The Intermediate course thus becomes one of four years, comprising pupils of early adolescent age and providing a well-rounded finishing course for those pupils who do not contemplate an advanced secondary-school education." The 1932 Report of the Chief Inspector of Schools for Ottawa seems to see in the new school a combination of finishing school and secondary preparatory school. " They would become real intermediate schools if they could give a four-year course and carry the pupil up to his sixteenth birthday when the school education of 75 or 80 per cent. of all young people in normal times would end." But, he continues : " If real intermediate schools were established their programme of study would include algebra, geometry, physics, advanced history and English, in addition to Latin as an optional study." This mention of optional Latin seems to suggest that he would make of the new school a compromise between Central School and Junior High, and this idea is further strengthened by his reference to " the intermediate school as a preliminary course to a secondary education." It is perhaps not unlikely that this is what the Intermediate School will turn out to be—an attempt at a more coherent and useful finish for those who will not matriculate, but a course that will not detract greatly from the convenience of a child who wishes to go on for matricula-

tion. The idea of having a group of secondary schools begin at age 11, parallel in their early years to the intermediate schools, is perhaps too unfamiliar to English-Canadians to receive general consideration. Any new type of school is considered only in the light of its propriety for handling all children, not any group of them alone.

There are five universities: Toronto, McMaster, Queen's, Western Ontario, and Ottawa (R.C.).

MANITOBA

Population (1931): *Ages* 7–14, 123,179; *Ages* 15–17, 46,522

Rural, 384,170; *Urban*, 315,969

Every person between the ages of 6 and 21 has the right to attend some school. Children of ages 7 to 14 must attend full time; children 14 to 16 must attend if not engaged regularly in some occupation. Two months' vacation, usually in midsummer, but in each of the prairie provinces in some rural districts where distance and weather conditions make it difficult to conduct school, the long vacation is taken in midwinter. The number of such schools has been greatly reduced in the last few years.

The Annual Report of the Department of Education for 1932 shows 151,927 pupils in its schools, of whom 132,111 were in the eight elementary grades, 19,017 in the three regular high-school grades and 799 in Grade XII, the post-graduate high-school year. The decade 1922–32 showed an increase of nearly 100 per cent. in secondary enrolment as compared with less than 15 per cent. in elementary enrolment.

The city of Winnipeg had 41,371 pupils, and its schools are organised on the 6–3–2 plan. All of the city's Grade VII, VIII and IX pupils are segregated in junior high schools. The first of these schools, was tried about 1920. But this form of organisation is not practised outside Winnipeg, though there are a few other cities with a sufficient number of pupils to make the plan workable. The junior high pupils do shopwork or some other form of manual training, but beyond this there is little technical work done in Winnipeg in the day schools except for commercial high-school courses. Outside Winnipeg there are no technical schools, except one for motor mechanics that has been operating in Brandon for three years. About a third of the high-school departments beyond Winnipeg are in consolidated school districts where a number of smaller districts have combined to provide a central school and transportation for pupils. This movement has, however, been practically at a standstill for several years, and many of the pupils of high-school grade are taught in very small schools, though not as high a proportion of the total as in Saskatchewan and Alberta.

In the winter of 1932–3 a movement was on foot to have the municipalities made the local units of school administration and support throughout the province. A committee of the School Trustees' Association, Union of Municipalities, Teachers' Federation, Department of Education, and Provincial Tax Commission, prepared a Report with recommendations to this end. The object was to reduce greatly the number of local units, and by enlarging them to equalise the present uneven burden of school support as well as the uneven privileges of school accommodation. The larger unit would make possible coherent planning for the schools of an area, including the provision of central post-elementary instruction. But when the Report reached the public, an outcry went up from the defenders of school district autonomy and the existing order. The voices were so numerous (counting three to five trustees in office in most of the existing twenty-two hundred districts), that it seems improbable that the provincial legislature will implement the recommendations of the Committee in the near future, and probable that Quebec and British Columbia will remain, for the present, the only provinces with school districts of municipal size. Manitoba, however, has had one such district for 14 years, constituted of its own accord, that has amply proved the desirability of the plan.

University: the University of Manitoba, Winnipeg.

SASKATCHEWAN

Population (1931): *Ages* 7–14, 177,565; *Ages* 15–17, 62,737

Rural, 630,880; *Urban*, 290,905

In rural and village districts the ages of free admission to schools are 5 to 21, in towns and cities 6 to 21. All children 7 to 15 who have not obtained high-school entrance standing must attend full time, except for certain exemptions in the case of pupils living beyond a reasonable distance from a school, etc. In towns and cities the long vacation is in summer, but in rural and village districts as little as one or two weeks may be in summer, the balance during the severest part of the winter.

The enrolment of 230,492 in Saskatchewan schools includes 28,598 in the four secondary grades. There are eight elementary years. The fourth high-school year is more generally taken in the high schools, and less commonly at the university than in most of the other provinces. Three-fourths of all university students enter with their first year completed, having taken it in a high school. The number in secondary schools is less than a third of the total number in secondary grades. Rural schools have almost as many, and the remainder are in the continuation rooms of village schools. To aid the teachers of these advanced pupils in small schools, the Department of Education has for three years been offering correspondence lessons. The number receiving this help by mail was 4,947 in 1931, and 9,206 in 1932. In addition there were 1,162 in 1932, not attending schools at all, but receiving full tuition by correspondence.

The number of secondary pupils has considerably more than doubled in ten years, as compared with an elementary increase of less than one-sixth. To help meet this situation each of the three chief cities, Regina, Saskatoon and Moose Jaw, has undertaken to diversify its post-elementary offerings by building and equipping a technical high school.

A new curriculum for the elementary schools was published in 1931, retaining the existing 8–4 division of grades between elementary and secondary. Between the secondary schools and the university, however, the last few years have brought changes in Saskatchewan that may very well be the precursor of a shifting of the junction of these two. The provincial university has had affiliated to it seven schools denominated "Junior Colleges," which teach the four high-school grades and the second year of the university course. Six of these are private schools, but one is the Moose Jaw Collegiate Institute, the city high school. In encouraging these affiliations, President Walter C. Murray of the University holds out the hope that all the work to the end of the present second year of the university Arts course may eventually be done in the secondary schools.

University: the University of Saskatchewan, Saskatoon.

ALBERTA

Population (1931): *Ages* 7–14, 128,740; *Ages*, 15–17, 45,761

Rural, 453,097; *Urban*, 278,508

Children are admitted to Alberta schools at the age of 6. All must attend a full-time school from the age of 7 to 15. Vacations are usually two months in midsummer, and about a week at Christmas and Easter as in all provinces.

Of 168,730 pupils in the provincial schools there are 24,266 in secondary grades. In the ten years just past the secondary enrolment has trebled, whereas the elementary increase has been only 7 per cent. Proportionately this is a greater secondary-grade increase than in any of the other provinces. The Annual Report of the Department of Education for 1931 states that facilities for secondary training "are being taxed to the limit in every part of the Province."

Alberta, in common with several of the other provinces in recent years, is tending to reduce greatly the number of its provincial high-school examina-

tions. Not many years ago the common practice was a Departmental examination for high-school entrance, and another at the end of each high-school year. The papers were set by the Department of Education and corrected there by a group of senior teachers and inspectors. Now the tendency is to leave entrance promotions and those of the junior high-school years in the hands of the teacher, subject to the approval of the inspector. In some cases, including Alberta, the Department continues to provide the teachers with the examination papers with which to test their pupils. The Alberta regulation of 1931 makes teachers' promotions permissible in Grades VIII and IX, and some subjects of Grade X. In Ontario the practice has been extended, with certain restrictions, to the matriculation year.

Alberta, like Ontario, has attempted to get away from the rigidity of the high-school grade system by specifying the number of units of work required for normal school entrance matriculation or a high-school diploma, and leaving some freedom to the individual pupil as to the order in which the subjects will be taken, and the number taken in any one year. All pupils in Departmental Reports, however, are still classified as being in one of the four grades.

Both of the biggest cities, Edmonton and Calgary, have technical and commercial high schools, and the commercial course is given in three other towns. An institution, unique in Canada as a provincial school, is the Institute of Technology and Art at Calgary. It offers a range of technical courses, below university level, but to students over the age of 16. The four provincial agricultural schools with a two-year course, open to boys and girls of the same age, are a further type of school which Alberta has shown initiative in trying. They are operated by the provincial Department of Agriculture.

An attempt at solving the rural academic high-school problem has been made by means of school consolidations, and the formation of rural high-school districts. There are 63 consolidated school districts organised from 202 smaller units, and 16 rural high schools supported by 75 smaller districts. The rural high school might be called a consolidated school for high-school purposes only.

University : the University of Alberta, Edmonton.

BRITISH COLUMBIA

Population (1931) : *Ages* 7–14, 96,416 ; *Ages* 15–17, 37,697

Rural, 299,524 ; *Urban*, 394,739

School accommodation must be provided between the ages of 6 and 16. School Boards may admit older and younger pupils. From 7 to 15, children must attend full time. Midsummer vacation of two months.

The " enrolment " in the provincial-school system is placed at 113,914. It is, however, computed differently from the enrolment figure of other provinces and would be higher on the other basis. Elsewhere each school at the end of the year reports the number of pupils who have been in attendance at any time during the year, and the sum of these records constitutes the provincial enrolment of the year, though pupils who have moved from one school to another are included twice. In the figure for British Columbia these duplicates are omitted in the " enrolment " of the year. The total includes 18,165 in secondary grades, all but 562 in three grades. It is proposed, however, to increase the course for matriculation to one of four years. The increase of secondary pupils in ten years has been 143 per cent., elementary 22 per cent., and a high-school correspondence course has been introduced that is taken by over 1,000 students.

In seventeen towns and cities there are commercial or technical high schools, and the proportion of high-school students in these courses has come to be well over a third of the total. Seven of the larger centres have adopted the junior high-school organisation to some extent. In Vancouver, out of every four Grade IX pupils, there are roughly two in an ordinary high school,

one in a junior high school and one in a technical or commercial high school. Nearly half the province's Grade IX pupils are in Vancouver.

The number of school children of foreign parentage is shown in the Report of the Department of Education. Japanese head the list with 4,128; Chinese number 1,325. Over 10 per cent. of each are in high schools. A few years ago Prof. Peter Sandiford, of the University of Toronto, conducted intelligence tests among British Columbia's school children, including Orientals. The following is from his Report: "The real meeting-place of East and West is no longer in Asia Minor, but along the Pacific shores of North America. No one can forecast accurately what the new immigration portends, but British Columbia, at least, should be interested in determining the mental capacities of her alien groups. . . . The Pintner-Paterson Scale of Performance Tests were used with 155 Chinese and 150 Japanese pupils in the public schools. . . . It will be seen (from the tabulated results) that the Japanese are superior to the Chinese, and both are greatly superior to the average white population. . . . The theoretical median score of white pupils is 100. . . . The median score for Chinese pupils is 107·9, for Japanese 113. . . . The Japanese in British Columbia are probably the most intelligent of all the racial groups which make up the total Canadian population to-day. . . . The superiority is undoubtedly due to selection. This superiority of an emigrant stock is no new phenomenon in world history. . . . But from the political and economic standpoints the presence of an industrious, clever and frugal alien group, capable, so far as mentality is concerned, of competing successfully with the whites in most of the occupations they mutually engage in, constitutes a problem which calls for the highest quality of statesmanship if it is to be solved satisfactorily. . . . These facts have very great importance for British Columbia."

University: the University of British Columbia, Vancouver.

[*Contributed.*]

CHAPTER SIXTEEN

SECONDARY EDUCATION IN CANADA: A SURVEY OF TENDENCIES PAST AND PRESENT

(*Note.*—While the writer of this and the following chapter assumes full responsibility for all that is contained in them, he acknowledges with gratitude that such value as they may have is very largely due to the co-operation of Mr. Andrew Moore, Inspector of High Schools in Manitoba, and of Mr. David Howat, Assistant in the Department of Education at McGill University. Mr. Moore's help has been particularly valuable in dealing with questions of history and policy, while that of Mr. Howat is mainly responsible for the analysis and setting-out of statistics.

Warm thanks are also due to Mr. J. E. Robbins, of the Dominion Bureau of Statistics at Ottawa, for the ready supply of indispensable information and for unfailing assistance and encouragement.—F. C.)

IT is not the object of these chapters to give a detailed account of the workings of the various provincial systems of secondary education in Canada. Such details have already been given in previous issues of the YEAR BOOK and in the preceding chapter, and they will be referred to here only as they may be needed to elucidate the theme now to be discussed. That theme may be stated as an attempt to indicate the main lines of change and development which Canadian secondary education may be expected to follow as a result of the crisis upon which it is now entering, in common with secondary education elsewhere.

Educational Thought and Social Change

Much is heard, particularly on this continent, of the "lag" in educational thought, and in development of educational institutions, behind the main currents of change in society at large. The economic crisis through which the world is passing is misconceived by educators, and its true significance for education is lost, unless it is seen as both an effect and a cause of deep-seated changes in life-philosophy. Beneath it and around it is a ferment of ideas out of which must crystallise a fresh synthesis—a revision and regrading of values that will reflect itself in a changed social order.

How sweeping the change in social order will be no man can safely forecast at the moment: probably less sweeping than at one time seemed likely. But whether the change involves a radical reconstruction of social and political organs, or, as is more likely, takes the form of changed spirit and direction in the functioning of the existing order, some far-reaching readjustments are inevitable.

To what extent this prospect is a consequence of a generation or two of extended facilities for education cannot be precisely determined. What is certain is that changes in our educational thought and practice in response to it must ensue. The "lag"

in response is inevitable, and it is likely to be more lengthy in proportion as educational services are highly organised and popularly controlled, a condition which is true of most parts of this continent.

All the more reason, then, for some considered attempt to foresee the lines that the response must follow. It is probably true to say that in Canada the " lag " is likely to be prolonged, perhaps dangerously so, not because of any excessive rigidity in central administration, but because of the deep-rooted character of the popular ideas which have determined the course of educational development for a century or more. Experienced and alert administrative authorities are likely to be much more sensitive to changing needs than a solid mass of uncritical popular opinion, convinced against all argument that the habits and practices of a century will meet the needs of the future as effectively as they have met those of the past ; or, it may be, not thinking at all but just holding blindly to established usage.

Evidence accumulates that a long and difficult process of converting popular opinion will be the chief cause of any " lag " that Canada will experience in effecting the necessary readjustments. Recent experience has afforded all too many instances of the shipwreck of the hopes of forward-looking administrators on these stubborn rocks.

The Significance of Secondary Education

The determinants of the whole crisis are to be found, it is clear, mainly in the field of secondary education. For, whatever the changed social order may be, whatever the ideas by which it is inspired, its cohesive force and its guarantee of continuity will be supplied by those whose abilities and opportunities are such as to enable them to spend a large part of the period of adolescence in serious studies. Democracies may repudiate the thought of an *élite* as passionately as they will, it remains true, nevertheless, that the fate of each one of them is determined by some kind of an *élite*, not the less effective through not having been deliberately planned for. If such an *élite* is the product of a system of secondary education deliberately planned to produce it, the society in question has at least that measure of control over its own life and destinies. If, on the other hand, the *élite* emerges in more haphazard fashion, determined by real powerful standards of valuation in the community which are not fairly and fully recognised and worked upon in the secondary-school system, then secondary education is so much less effective as an instrument of social control. School lacks relevancy, and society lacks a fully self-conscious and recognised animating principle.

The issue is evaded rather than met by an ultra-democratic policy of High School Education for All. Equal opportunity is not equal *use* of opportunity, and a generous universal provision does not avoid the emergence of an *élite*. It merely leaves the

criteria to be determined, and the *élite* to be constituted, by social processes other than those of the selective and disciplinary agencies of the school system. The issue has still to be decided, but it is fought out in a general social *mêlée* rather than predetermined by an organic use of educational institutions.

The Need for Organic Planning

It is probable that circumstances will force upon the people of this continent, both in Canada and the United States, the necessity for evolving a truly organic society from the cheerful scramble of pioneering energy which could function as a society in the buoyant atmosphere of nineteenth-century expansion. Though the process will be painful and difficult, it need not be disruptive; though some democratic techniques will have to be discarded, democracy itself need not be compromised ; though the readjustment of ideas will be in many ways profound and far-reaching, the demand can be met by a people of sufficiently trained intelligence.

But the old over-simplified picture of a free scramble for place and wealth, carried on from a level determined by a uniform and universal provision of public schooling, will no longer serve. For it belongs to an age of infinite optimism and indefinite expansion, where the fact was concealed that, not Liberty (in the " free for all " sense), but phenomenal Good Fortune was the real sustainer of success. In its place there must be substituted a picture of a much more determinate culture, and of a much more consciously " planned " society, where the selective instruments must occupy a much more important place. Among these instruments, as Europe discovered long ago, a well-diversified and highly articulated system of secondary education will play a decisive part. Thus may Liberty be fructified by an ordered social intelligence, and Equality pass from the discrete mathematical to the concrete organic.

It is in the light of some such prospect as this that the facts and possibilities of Canadian secondary education must be viewed. With that prospect in view this essay will attempt :

1. To limn, as in a portrait sketch, the common countenance of Canadian secondary education.

2. To indicate the cultural influences that have been at work through Canadian history to determine the form of these common features.

3. To suggest, in broad general fashion, the lines of change that may be followed under the stress of changed demands and changing social forms and values.

Three Characteristics of Canadian Education

The firm entrenchment in the Constitution of provincial autonomy in education, and the variations of practice that are

revealed as between one province and another, must not be allowed to obscure the fact that there really *is* an education that can be called " Canadian " *tout court*. French Quebec, indeed, is Canadian in its own distinctive way. It can hardly be regarded as a mere *enclave*, since its existence and the resolution to preserve it are a main determinant of the whole Canadian polity. Nevertheless, it cannot be considered here, for though the system of education that now operates in Catholic Quebec has well-marked North American features, it is French and Catholic rather than Canadian in the sense in which the education of Ontario or Saskatchewan is Canadian. Leaving aside, therefore, Catholic Quebec for the separate treatment which it ought to receive, we may take the rest of Canada as revealing common features which may be taken in a single picture.

(i) *The Grade System*

Though we are concerned here only with secondary education, the features cannot be understood without recalling the broad facts of the working of Canadian systems as a whole.[1] The foundation of everything is the " grades," which, like the English " standards " of a former day, appear to have been designed originally as unit-measures of school achievement, and have now come to mean generally a period spent in receiving instruction. The metamorphosis is a familiar one. A " stint " of work is determined, suitable for normal children of a given age and standing. For teaching purposes a measure of time, a school year, is allotted for this work, and then, quite naturally, the group of pupils who are spending a year on the same course of work come to be described as a " grade." Thus the term means, (*a*) a standard of achievement, (*b*) a year's work, (*c*) a group of pupils. It means the first when the pupil is spoken of as trying to " make the grade," the second when he is spoken of as " repeating a grade," and the third when we are told he is " in Grade Four." In practice the second and third of these meanings have overwhelmed the first. Almost universally in Canada a grade means a year spent on a course of work common to a group of pupils of a given standing. The idea of promoting a pupil to the next grade as soon as he has mastered the work of his present grade, working at his own pace, is hardly ever applied in practice. How little of acceleration there is, in the elementary grades at least, for clever pupils, can be seen from figures given in the appendix to the following chapter ((v), page 604).

As for the secondary grades, some provinces, like Saskatchewan, require that the pupil shall have attended for the number of years corresponding to the grades taken before he is admitted to the School Leaving Examination. Thus one might say that the idea of a grade as a year spent on a prescribed portion of a course of study is well-

[1] For details the reader is referred to Dean Pakenham's account in the YEAR BOOK for 1932.

nigh universal. Weak pupils may be required to repeat a grade ; rarely, very rarely, a particularly bright pupil may " skip " a grade altogether ; but the " making " of a grade in less than a normal year, though it does occur, is so difficult to provide for in the working of the " system " that it is not encouraged. Current practice is all against it, and there is reason to think that popular sentiment, resting on a rather wooden but very stubborn notion of equality, is strongly against it too.

Thus a grade is a sort of pipe-section a year long, and education, in the school sense, is built up of such sections joined end to end. Normally the first eight (in Protestant Quebec the first seven) are elementary or " public-school " grades, while Grades IX to XII (or VIII to XI) are high-school grades.

(ii) *Localised Finance and Local School Control*

The grade system is one basic fact to be grasped. Another is the system of localised finance and local control of education which is also well-nigh universal. The unit everywhere is the school district, except in British Columbia and Protestant Quebec, where it is the municipality (meaning an administrative area larger than a school district, not a " town " as in England). There can be little doubt that the very strong attachment to this unit can be traced back to the usages of the English parish, converted as it was under Tudor autocracy into an administrative instrument. The parish, in this sense, minus the squire and the Anglican parson, was transferred by emigrant Independents to the village communities of New England, and from thence it spread into Canada with the immigration that followed the Revolutionary War. Ontario (then Upper Canada) built up its system on this basis, when conditions were still not unlike those of eighteenth-century New England, and it has spread from thence westwards. The Maritime Provinces derived it direct from New England rather than from Ontario, but the development has been much the same. In later years the practice of the more advanced and long-established system of Ontario was often consciously copied.

For a long time the school district unit did correspond to the real facts of community life. Further, it was thoroughly congenial to the democratic and equalitarian temper of the founders of Canadian institutions, who, it must never be forgotten, came from the revolted colonies rather than from Britain. Also, and this is important, like the " grade " itself, or the city block, or the " quarter-section " of 160 acres by means of which the prairie lands were allotted, it was an extremely convenient and manageable unit, capable of indefinite repetition. Enterprising pioneers, eager to get on with the job of economic development and having little time to spare for the laborious excogitation of new instruments of action, least of all in a field so well surveyed as they understood education to be, could hardly be expected to do other than use the familiar unit almost like a land-measurer's chain. In the cities,

as they grew, it soon ceased to have any real meaning. In the rural areas, where even to-day more than half the school children of Canada are being educated (see appendix (ii), page 603), its increasing failure to represent the real community facts has been all too tardily recognised. An influential Committee, appointed by the School Trustees' Association of Manitoba to enquire into the whole question of local administration and finance, reported (February 1933):

> "It may have been possible to consider school districts as communities forty years ago, but certainly they are only small sections of communities to-day."

And of finance the same Committee says:

> "The system of school finance, built for a day when the majority of rural schools derived their revenue from grain lands of relatively equal producing power, has not been adjusted to the great variety of economic situations that have developed in rural Manitoba during comparatively recent years."

A further passage in the same report states the issue with such force and clearness that a somewhat lengthy citation seems justifiable.

> "During this period of school expansion and school improvement (i.e. in recent years) the local unit of administration, with one exception, has remained what it was in the beginning; the method of raising school funds by means of a tax levied on property valuations has remained on the same basis as that for municipal services, even though the benefits for the two services differ widely; and the method of distributing provincial aid, with the exception of special aid to very weak school districts and additional aid to secondary schools, has remained stationary. On the one hand is a picture of expansion and progression, on the other a failure to adjust to meet changing conditions. The past fifteen years have demonstrated that a progressive educational programme for all cannot be administered and maintained by a system of school administration built for the economic conditions of pioneer times."

Positive and emphatic as it is, such a view is largely shared in Canada by those who are able to perceive the wider administrative responsibilities. A recent Commission in New Brunswick has pronounced in favour of the county unit, and it is generally understood that Nova Scotia may be asked to adopt the same basis. Yet the effects of long habit and perhaps of the tasting of a little brief authority among the rank-and-file, may be judged by the treatment meted out to the Manitoba Committee's proposals by a Convention of School Trustees. A scheme for larger units and for the institution of a Central Provincial Board with large powers of co-ordination and financial adjustment was rejected by an overwhelming majority. And a year or two ago somewhat similar proposals in Alberta met with the same kind of reception.

So, in this regard at least, the "lag" is likely to be prolonged in Canada.

(iii) *Central Control of Curriculum*

A third feature of the common countenance of Canadian education is found in the minute prescription of courses of study and textbooks, and the meticulous detail of official regulations. Historically this feature comes from the same source as the "grades." Fundamentally it is due to the absence of a teaching personnel, stable, permanent and competent enough to be charged with a fair share of the adjustment of educational resources to particular needs. Yet, somehow or other, the regular step-by-step progression of children through the rudiments of civilised learning had to be secured, or the continuing texture of a civilised order would wear dangerously thin. It needs little imagination to see how real the danger was in the woodland clearings or the coastal fishing-villages of a century or more ago. So the task of holding up the sagging links came back upon a few vigorous and long-sighted administrators at the centre, such as Ryerson in Ontario. Small wonder that men like Ryerson were strongly influenced by Prussian models. Clear prescription of a simple minimum; encouragement of local effort by central grants; minute prescription of courses of study, textbooks and even details of teaching; and supervision by the most effective inspection that could be devised; such were the natural and inevitable methods if sheer deficiency of teaching personnel was not to prove disastrous. At the same time one finds that measures to ensure a stable and competent teaching profession were vigorously pursued. Perhaps it is to be expected that when these measures do begin to succeed, as they are succeeding now, and begin to produce a race of teachers able to assume the proper load, the long-established habit of administrative paternalism should continue beyond its limit. One excuse that might be offered is to be found in the continuance of the small local unit which places local control in the hands of men whose educational vision is often limited and who need the tutelage of a watchful central authority. The coming of the larger unit seems to be an essential condition if the process of relaxation and emancipation that is now becoming pedagogically safe is to be administratively effective.

Results of these Characteristics

Depreciation of Teaching as a Profession

The results of all this history have been both good and bad. A bad one is the continuing disposition of able young Canadian men to shun teaching as a career. There can be no doubt that the main reason for this is not so much inadequate salaries as inadequate social recognition, and the lack of that independence and scope for responsible exercise of trained judgment which are to be found in other professions. The work is looked upon as of the type that a good lady secretary or typist can do—the intelligent execution of instructions and the day-to-day supervision of an

ordered routine as prescribed by authority. So it is quite natural that women rather than men are regarded as the people who should teach, while ambitious young men who do go into education are apt to regard themselves as unsuccessful if they do not achieve a fairly lucrative and authoritative post in administration rather than in teaching.

Public Support for Education

On the other hand, the history here sketched has had the good effect of making education very much a public concern. This character has been further intensified by the fact that educational issues have often been intimately involved with burning questions of language and religion. While it is true that the public notion of " education " is often deeply stereotyped, a thing of rather wooden routine, formal " schooling," " grade promotion," " graduations " and so forth, the practice of the schools does rest on a solid ground of public understanding and public support. Even the " private " schools have to conform; they dare not deviate very far from what the ruling public opinion takes the routine education to be.[1]

Traditionalism

It is here that we come upon an important difference between a new country like Canada and an old country like England. Canada has practically no " free " public opinion on education such as that which can make itself so effective in the British House of Commons or in the British Press, with enlightened, well-informed and disinterested criticism of public educational policy. The Press, with rare exceptions, speaks on education with a mixture of traditionalism and platitude, in this, as in much else, reflecting the prejudices of its audience. Such professional journals as exist confine themselves usually to pedagogic technicalities, and do not discuss freely questions of broad public policy, though there are signs of a change in the West. Generally the official imprimatur is over all their works and some of them are published by official authority.

The result is, not only a serious lack of real criticism of official proposals, but, what is perhaps even more serious, lack of intelligent backing for sound new departures. There is good reason for thinking that administrators are ready to be much more adventurous than public opinion will allow them to be. For instance, it was not the Inspectors and the Departments, but the public, as represented by the School Trustees, who rejected so emphatically the very

[1] It must be confessed that long-continued depression has brought a change, whether only temporary or not remains to be seen. Particularly in the West the failure of schooling to guarantee " success " has induced a disposition to minimise its value and to reduce support, while the check to stabilisation of the teaching profession which has been caused by drastic and sometimes unjust retrenchment must defer the moment when it becomes safe to transfer the main burden of responsibility from the system to the teacher. See Prof. Macpherson's chapter in this volume, pages 281–93.

salutary proposals in Manitoba that were referred to a few pages back.

Thus it would be a mistake to assume that the views of Canadians on these matters are always those of open-minded, experimenting pioneers. For in matters of educational policy at least Canadian public opinion seems almost fundamentalist in its tenacious adhesion to the use and wont of its own North America. As usual, the rejection of tradition is the rejection of someone else's tradition, not of one's own.

Five Special Characteristics of Secondary Education

The foregoing account of the general administrative setting may serve to make intelligible certain characteristics which are revealed by secondary education throughout English-speaking Canada.

(i) *Secondary Grades, not Secondary Schools*

The most important fact to grasp is that, in practice, the term " secondary " refers, not necessarily to a school, but to a *group of grades* in the whole series. In most provinces this is the group IX to XII inclusive. The grades in question need not necessarily be taken by way of formal teaching in a fully organised high school. In some provinces, in the Maritimes for instance, many pupils take the grades, wholly or in part, in one-room rural schools. There is no necessary removal at the beginning of the secondary period, as in England and most European countries, to a fully organised secondary school. The recent rapid increase in " high-school " enrolment has taken place to a considerable extent in these schools. In some degree it consists of pupils who take the earlier secondary grades in the little local school, and then either leave or transfer to a fully organised high school in the city. Thus in Saskatchewan the rural schools accounted in 1920 for only 7·7 per cent. of the high-school enrolment; in 1930 the figure was 20·9 per cent. Corresponding figures in Alberta are 8·9 per cent. and 11·6 per cent., though the latter figure would have been much higher had Alberta not recently provided for rural high schools to serve a group of consolidated school districts (see appendix (vi), page 604).

In some provinces, Saskatchewan for example, the law imposes on school districts the obligation of providing in the local school for at least the first two of the high-school grades, and the practice is general in the Maritimes also. Some pupils remain to the matriculation stage, but the majority either leave or transfer to an urban school.

The Dominion Bureau of Statistics defines a high school as " a secondary school in all provinces, or at least a school where one or more teachers devote the greater part of their time to instruction in the secondary grades." The phrase " secondary grades " is the significant term here.

Except in Ontario, there is no general use of a local unit for high-school purposes different from that for elementary education. Manitoba has made permissive legislative provision which is very little used. Alberta failed in an effort to create such units a year or two ago. " Consolidation " has done something to improve facilities by concentrating the pupils from surrounding districts in a central village school. Over two hundred of such consolidations have been effected, mainly in Manitoba, but the range over which each one can operate is limited and, with over 2,000 school districts in Manitoba alone, it is clear that the influence of consolidations does not go very far.[1] Distance and climate set a severe limit upon what can be done by daily conveyance, and Canada has not yet turned to a comprehensive system of boarding such as has been followed in Southern Rhodesia.

It should now be clear that, in Canada, while the term " secondary education " generally implies a *school* of a certain kind, with a stated minimum of staff and equipment and facilities for the " secondary " kind of school life, it need not necessarily do so. In several of the provinces a pupil may complete his grades without attending school at all, carrying out his work under the supervision of the Correspondence Branch of the Education Department.

In the large towns and cities fully organised schools offer a wide variety of provision and, in the opinion of many good judges, could do work with their best pupils of an even more advanced standard than is permitted them to-day. In many a small town, too, excellent secondary education is provided in a well-equipped local high school; while even the small country school, if the teacher is capable and willing to remain at the work and the Trustees are sympathetic, can achieve surprisingly good results. Moreover, there is a distinction of school types. The ascending series—continuation school, high school and collegiate institute —which has been worked out in Ontario, has since been copied by some of the Western provinces. And all the time, by means of administrative pressure, by the tightening of regulations, and by the inducement of carefully devised conditional grants, the Departments of Education strive to raise the minimum that is demanded for recognition as a secondary school. Indeed, not the least maleficent of the effects of the depression is the cruel reduction of Departmental power to offer inducements to raise minimum standards.

Yet, to an observer not brought up in the system, all the diverse types appear to be only variant forms of providing for the standard *grades*, and Departmental pressure to raise standards of work and organisation seems to produce only a more efficient handling

[1] Consolidation has been applied almost exclusively in the elementary sphere. But the rural high schools of Alberta carry it into the secondary field. It would seem, however, that the consolidation process, as generally understood, cannot be extended to meet all the needs of effective distribution of good secondary education. The wider administrative reform that is called for is discussed later.

of the universal grade scheme. The "grade" conception appears to exercise a well-nigh absolute sway, and the publicly provided school that sets out with courage and initiative to blaze its own trail through its own territory is still a very rare phenomenon.

The dominating—and limiting—conception of "making the grades" is sustained more by the habit of public opinion than by a set policy on the part of Education Departments. Local school boards are, in general, free to diversify and enrich school courses above the minimum set by the Department. That many of them fail to do so and adhere to a somewhat rigid operation of the set grades, is due rather to long and unimaginative habit and an overvaluing of the formal act of "graduation," than to meticulous dictatorship exercised by the Department. Possibly, too, a deeply ingrained and somewhat mechanical idea of the postulates of democratic Equality, such as we refer to later, exerts its influence. It may be that, since, in many areas, conditions are such as to render impracticable the provision of a fully organised school, the requirements of the grades must be kept down so that chances may be equalised all round.

Domination by the "grade" concept to such an extent that "secondary education" is apt to mean a group of grades rather than a kind of school life, may be, after all, only a phase of growth. Signs that it may be passing are not lacking. Even in England it is still possible to matriculate without attendance at a secondary school and to take a degree without attendance at a university. Besides, one must never forget the peculiar conditions which differentiate Canada from the old countries of Europe. The sparse but unequally distributed population, the absence of social classes, the rapid growth of some communities in recent years, the lack in many areas of cultivated and able men with time to spare for school problems, and, above all, the *simultaneity* of growth of institutions which is inevitable in a new country (i.e. the necessary effort to achieve so many things at once); all these have their effect in producing and prolonging the view of the school as a programme of grades.

(ii) *Rigidity of Curricula and Examinations*

Whatever the causes may be, the consequences are what might be expected: domination of teaching by the requirements of set courses of study, official textbooks and Departmental examinations; emasculation and formalisation of subjects like science where laboratory equipment is needed for fully effective teaching; lack of creativeness and experimental spirit in teaching subjects like mathematics; and a tendency to reduce history and literature to verbal memoriter work. The practice is widespread in Canada of testing even the learning of poetry—"memory work" as it is often called—by requiring the writing out, with neat handwriting and correct punctuation, of the poem learned. Appeal to the ear is largely overlooked in consequence.

In many of the organised high schools serious efforts are made, with considerable success, to vitalise and enrich the material of prescribed textbooks and courses of study, and it is now the policy of most Departments of Education to throw greater responsibility on the teacher, to widen the range of his discretion and to reduce the pressure of examinations. Examples of this policy are cited in Prof. Macpherson's chapter in this volume, pages 281–93. Nevertheless, even in the large high schools, one gets the impression that resources are not always being used to their full value, that weaker pupils are attempting what would prove to be beyond them if real grasp and understanding were always demanded, and particularly that abler pupils are suffering serious retardation when their actual progress is set against their real abilities.

(iii) *Instability of Teaching Staffs*

But the strong and commendable desire to " give everybody a chance " by providing " high-school facilities " near at hand still tends to fix the limits of development in the system as a whole, and examination successes are still the popular measure of educational efficiency. Moreover, especially in the Prairie Provinces, the ideal of a stable teaching personnel has not yet been achieved. Conditions of service do not always favour such a result. There is no general standardisation of salaries, and the practice of engaging teachers not permanently, but by contract for a period, which is universal in Canada, does not conduce to stability. In the East, a contract once entered into is generally valid for a year, and, in point of fact, employment under a large school board is really permanent employment, subject, of course, to satisfactory work and good behaviour. But there are provinces where teachers are dismissible on a month's notice, and the practice has been not at all uncommon in such areas, during these years of financial stress, for a Board of Trustees to dismiss all its teachers and either re-engage them or take a fresh batch at lower salaries.[1] Throughout the Prairie Provinces there is a ceaseless ferment among teachers occasioned by this ever-present sense of insecurity, and it is not easy to see how this can be allayed under the existing system. The rate of mobility among teachers, especially in the West, is high, and everywhere the view is common which regards teaching as only a stepping-stone to something better.

Great advances have been and are being made in the training of teachers and the ill winds of depression have blown

[1] Such practices, sometimes defended as called for by " business methods," illustrate the comparative lack of any *organic* conception of a school. Those who do such things have no idea that they are mutilating an organism ; they would feel rather that they are reconstructing one of a series of " chain-stores." Much current talk about " social reconstruction " betrays the same dangerous habit of mind, apparently a result of infection by the analogy of the machine and the organised " plant." School buildings are often called " school-plant " in Canada.

good in the form of candidates of better quality, and of a more severe selection. Recently a Canadian Teachers' Federation was formed with the express object of developing a common consciousness among Canadian teachers and of combining forces for the removal of still formidable obstacles to full and adequate professional recognition. Its work is hampered by difficulties of intercourse over so vast an area, and by a federal system which places education under the virtually autonomous control of nine distinct provincial governments. And provincial prides and jealousies are still strong, even among teachers themselves. Distinctly Canadian (as distinct from provincial) sentiment is still weak, but the Federation has already achieved something and promises to achieve more.

Of the teaching profession as a whole it may be said that effective nation-wide organisation, the infusion of a rich and vigorous Canadian spirit, and above all, adequate public recognition of a status in accord with the real responsibilities, together form essential conditions of that construction of an organic society which is the real challenge to Canada to-day. The suggestion that one of the master keys of the future lay in such a changed attitude towards teachers and teaching would come with a shock of incredulity to most of Canada's public men, but it is true nevertheless. Current statesmanship, preoccupied with the immediacies of the moment, does not easily discern the true roots of the future.

(iv) *The Standard of a Broad Liberal Education*

The rigours and uniformities of the various systems are not without some good results, however. One of great value is the faithfulness with which Canadian practice has, in general, adhered to the principle of a standard curriculum. The excesses of countless "electives," of freak "units," and of sentimental pandering to immature impulse and sheer whims among pupils, such as have marred much high-school work in the United States, have generally been avoided. It would be broadly true to say that no Canadian pupil could pass through the high-school grades without doing substantial work in English language and literature, in mathematics and some branch of science, and in history (including British and world history). Too many pupils in some provinces fail to take a second language, but this does not mar very seriously the general picture of a stable scheme of basic studies. The liberality of the courses, on paper at least, is impressive, and those in history, in particular, contain much from which English schools might copy with advantage.

Thus the notion of a broad liberal education is still firmly planted and seems likely to remain so. But there are some grounds of criticism. Studies are too much broken up to fit the year-lengths of the grade system. Thus the list given for Ontario in the 1931 *Annual Survey of Education* of the Dominion Bureau of Statistics gives no fewer than 38 items including (separately) Canadian, British, modern and ancient history, stenography, type-

writing, household science, commercial law, commercial English, commercial Canadian history, business arithmetic. Botany and zoology appear, but not biology. The Saskatchewan list includes five headings of history and such items as reading, supplementary reading, spelling, writing and cadet instruction. Algebra, geometry and trigonometry are practically always given separately, and often taken separately in the grades. Indeed, in some systems in some grades it is not possible to take algebra and geometry together. A *practical* handling of mathematics is not at all common: the textbook rules almost universally.

The same detachment holds with the sciences. A pupil may be doing physics one year and chemistry the next, though the two are very generally taken together. Biology is beginning to appear in some of the lists.

Latin is taken by far too many pupils for too short a time to be of any value. Thus for the Lower School (first two secondary years) in Ontario, the numbers given for the year 1931 are just over 28,000. For the Middle School (the succeeding stage) they are about 15,600. A more extreme case is to be found in the rural schools of Saskatchewan, where the numbers taking Latin in the various grades in 1931 were:

	IX	X	XI	XII
Total Pupils in Rural Schools .	4,250	2,590	584	41
Pupils taking Latin . . .	1,268	693	137	12
Per cent. . . .	30	26·8	23·3	29·3

Even allowing for removal of pupils to urban schools where they would continue their Latin, we cannot fail to see here evidence both of serious misuse of time and, no doubt, of a great deal of harmful boredom with school studies.[1]

(v) *Down-Drag of Secondary Education on the Universities*

Reference to Latin suggests the vexed issue of relations between secondary education and the university. The cry that the university "dominates" the secondary school is heard as loudly in Canada as elsewhere. But there is strong evidence that the domination works the other way also; the necessities of the situation of the secondary-school system force the hand of the university. This is especially true where, as in the West, the university is provided and supported by the provincial government, or where, as in some parts of the East, the university works under strong government

[1] Many pupils begin Latin because they, or their parents, feel that they "might need it some time." Where selective machinery is absent, or little developed, or not brought to bear at a sufficiently early stage; and where it is the practice to think of studies in terms of detailed subject prescriptions, the tendency has some excuse. But it involves much waste nevertheless.

influence. The ruling concept of the grades is continued in the rigidly fixed " years " (four normally) of the university ; there is the same frequency of piecemeal examination ; the same tendency to prescription in textbooks and " assigned readings " ; the same disposition to measure progress in terms of accumulated " units " and to insist on performance of the minutiæ of prescribed teaching-ritual ; and the same reluctance to require the student to launch out on the unobstructed " long-run."

Stirrings of reform are not absent and, particularly in honour courses, the encouragement of longer spans of work and of more independent study by students is becoming marked. But the universities are still held firm at the lower end in the solid column of the grade system. It is the normal expectation of the high-school pupil that upon " graduating " from school (significant term !)[1] he can pass without hindrance, if he chooses, into the university. As in England, high-school leaving and matriculation are provided for in one and the same examination with special stipulations as to subjects and standards for those who wish to enter the university. But popular pressure tends to minimise the significance of these stipulations, while, on the other side, attempts to popularise a " general " course, liberal and varied in content, but not leading to the university, have met with poor success. Indeed, there is a disposition to recommend diversifications of the normal course on the very ground that those who take them are not thereby debarred from university entrance. A striking illustration of this comes from Ontario. That province has recently made provision for vocational schools and for vocational departments of high schools as part of the general provision of secondary education. Apparently the fear that these " vocational " courses might be shunned as side-tracks leading away from the university had to be met. Accordingly, we find in the report of the Inspector of Technical Education a year or two ago, this significant paragraph :

> " The University of Toronto has established matriculation courses for students in technical schools who are candidates for admission to the Faculty of Applied Science (i.e. Engineering) or Household Science. Recently, the University has also approved of special entrance requirements to the course in Commerce and Finance for students who are in attendance and matriculate[2] from a commercial high school or department. Credits are also given at the Ontario Agricultural College for work done in the vocational agricultural schools, and at Queen's University for work done at the mining schools. *No door now remains closed upon vocational-school students.*"

[1] The obscuring of the distinctive function of the university is much encouraged by the general practice of ceremonial " graduation " from all kinds of educational institutions, including sometimes even elementary schools. The ceremony is modelled on the lines of a University Convocation and seems to encourage, not only the confounding of standards, but also the habit of stressing the value of the tangible end-result rather than of the course of training upon which it sets the seal. But the practice has universal popular support.

[2] The use of this term should be noted.

The meaning is plain. Diversification of high-school courses must be paralleled by corresponding diversification in the university; there must be no narrowing down of the broad highway as it passes under the university arch. The influence of such a point of view on vocational education itself should be clear enough; at the moment we are concerned with its effect on the university and on the power of the university to exert a beneficial directing influence upon the schools. Not only does the university become increasingly a technological institution; it is also deprived, in great measure, of its salutary power of attraction towards the ideal of pure study. It is not allowed to " dominate " even where it might do so with good effect and in a way which is wholly in accordance with its great traditions. The Faculty of Arts may still strive, with varying success, to maintain in the schools the necessary minimum of preparation in humane studies. But even so, Latin has gone in some universities, and students can enter the Faculty of Arts with little or no equipment in any language but their own and sometimes with very poor equipment even in that. For entrance to other Faculties the demands may be even less, though Law and Medicine, as though remembering their honourable academic pedigree, still stand, for the most part, for a sound preliminary training in the humanities.

Special advocates of still unprivileged vocations are thus encouraged to put forward their claims. McGill has recently established a degree in Library Science, and is being pressed to offer a degree for nurses. Meanwhile the Agricultural Schools are tending to become just degree-granting institutions, and vocational education is suffering an unfortunate deflection of interest away from the world of real professional and craft achievement and towards the seductions of the universally coveted degree.

It would seem that a battle royal is in course of preparation. A change of attitude in respect of the real focus and objective of vocational education may have some influence in determining the result. But the main battle-ground will be around the university gateway in an effort to narrow the entrance and to assert the university's rights of selection for its own purposes. The issue will depend very largely on the capacity of public opinion to relate wisely the function of the university to a large and clearly conceived ideal of the necessities of an organic society. This question is discussed later. Here it will be sufficient to call attention to the figures given in the appendix ((viii), page 606). Not all Canadian universities are specified there, but the selection is fairly representative. For the reason that many students, especially in the West, enter in the Second Year, having completed Grade XII (or " Senior Matriculation ") that year should be taken as the point of departure. Counting this as 100 the numbers in Third Year can be taken as 69 and those in Fourth Year as a little under 60. The loss includes some who left for financial reasons, but the bulk of it is undoubtedly made up of students who fulfilled

their ambition, or that of their parents, by entering the university, and there discovered either that they were unfit for university studies or that university studies were unfit for them. It is probable that much of the large increase in numbers in recent years has been brought about by students of this type. Unfortunately many of them do not make the discovery referred to above, and stay on in efforts to " make the grade " which fail all too often.

Moreover, there is some disposition, even in university circles, to misconceive the function of a university as a place of self-discovery, and to tolerate a considerable amount of aimless wandering along the show-counters of the academic cafeteria in the belief that the wanderers will " at least get something."

Reform must begin in the schools, but as we are concerned at the moment only with description, the discussion of its possibilities must come in its proper place. The same may be said of further discussion of problems of vocational training.

Retrospect: Origins of these Characteristics

What is given above is no more than a sketch of the main lineaments of Canadian secondary education, but it may be sufficient to indicate in a general way where the problems lie, and to hint at the directions in which developments may be expected.

But before we proceed to consider these possibilities, it is necessary to take a glance backwards in order to understand the influences which have determined a Canadian point of view that is now so strongly marked and so firmly fixed. Description and statistics can be utterly misleading unless they are read as the portraiture of a living organism which has had its own history.

The New England Pattern

A full discussion of the life of this organism involves nothing less than a history of European North America. The fundamental fact to be remembered is that Canada, though British in allegiance, is North American in history and psychology. Also it is, in general, continental where England is insular. Canadians, flanked by a great Power with a population twelve times their own and commanding enormous wealth, make desperate efforts to maintain a separate identity. And not without some success. But they cannot escape the influences of their history and of their North American situation. The frontier, even with barricades of tariffs and cordons of immigration officials, can no more prevent the passing and re-passing of cultural influences than a five-barred gate can keep out fog. And even if Canada could seal herself up along the southern frontier she would still be in North America. Hence, though Canada may be, in the United States sense, less " American " than she looks, she is more American than she feels.

English people when they look at Canada are apt to see only a part of the British Empire. They miss the great near neighbour with a population nearly double the white population of the whole British Commonwealth.

We cannot here elaborate all the significances of this situation. But it must be kept constantly in mind.

Canadian ideas on education as expressed in the ruling system do, indeed, take their origin from Colonial New England. But the " explanation " of the system of to-day demands more than the tracing of the filiation of these ideas as they passed into the Maritimes and Quebec and Ontario with the Loyalists and other immigrants after the Revolutionary War. The *groundwork* is undoubtedly of New England ; itself, socially and culturally, a product of Puritan England of the seventeenth century. But other influences have contributed to the total result, influences brought to bear in Canada itself. In Nova Scotia, the garrison at Halifax kept open a channel for powerful influences from England, while Presbyterians and Highland Catholics from Scotland have played their part in the Maritimes generally. Protestant Quebec is still profoundly influenced by the necessities of the concordat with the Catholic majority. Ontario was for long the scene of a struggle, sometimes bitter, against a determined effort to plant there an Anglican squirearchy, and the issues of the English Civil War were raised all over again in a backwoods form. In more recent years teachers from Great Britain in school and university have contributed to some modification of the normal American contours. But the basic New England pattern has persisted through all the vicissitudes of growth and change. From its two main early centres in Nova Scotia and Ontario it has spread over the whole width of the continent, and its elemental themes have been repeated and varied and extended to form the elaborate-looking yet really over-simple structure of Canadian education to-day.

The jealous vigilance with which each province guards its constitutionally guaranteed autonomy in education is not accompanied by any marked desire to individualise its internal organisation. Differences there are, of course, some of them significant and interesting, but they are not of such a character as to break the general unity of the common features. The newer provinces have been content, in the main, to imitate the older, and there has been little trace of subtlety or of daring pioneer innovation in the adaptations which the various systems have been called upon to make. Just as, in the Middle Ages, the standard type-form of the " secular " cathedral or collegiate school was adapted to meet every kind of scholastic need, so Canadians have kept to the old ideas of administration and school organisation, applying them, often uncritically and without subtlety, to every need that arose. The parallel development in the United States of the same original New England forms has been far more influential than any

importations from Britain. The introduction of the grade system and the substitution of the more popular high schools for the earlier and more selective "Academies" are instances of the tendency to follow in Canada the developments that were being worked out to the south.

Mechanical Multiplication of the School District Unit

But the copying—if indeed it may fairly be called copying at all—was not blind. Rather it should be regarded as a parallel development from the same original stock. What needs to be explained, therefore, is the tenacity of the original forms amid changing conditions of time and place. The "little red schoolhouse" idea of sentimental tradition has been carried from the New England village to the Pacific, and has covered the prairies with a close mesh of school districts. In the towns it has duplicated and reduplicated itself like a coral animal into the massive aggregation of the large elementary or high school. "Aggregation" is a justifiable term, for the same tendency to think in terms of simple mechanical units and to avoid the complexities of more subtly organic thinking, that is represented in the universal "grades," is found also in the habit of describing schools as "one-room, two-room, twenty-room, thirty-room" schools, rather than in terms that would indicate organic differences of function. The process of growth has been one of addition and multiplication rather than of organic evolution.

Such persistence points strongly to the continued operation of a few underlying ideas acted upon rather than brought to clear consciousness for critical analysis. They are not hard to find. A passionate and deeply habituated democracy expressing itself most strongly in community control of local affairs; suspicion of, and antagonism to, central government, partly by inheritance from the eighteenth century; rooted habits of free association for common purposes; readiness to improvise endlessly on a simple basic theme; a spirit of individualist enterprise encouraged by Puritan ethics and theology and stimulated by the prospect of rich prizes for the industrious and venturesome; the lure of an ever-receding frontier causing repeated breakaways from old groups and the forming of new; and finally, the strongly externalised habit of mind that comes from a century or more of successful material pioneering and tells so strongly against the formation of habits of inward meditation and radical criticism; such are the outstanding traits of the type that accounts for the forms of Canadian educational systems. Preoccupied on the one hand with economic conquest and expansion, and on the other with preserving at least the essentials of social and civilised order amid the strains of pioneering, subtlety of analysis was hardly to be expected of it, and school forms were carried on like the forms of the log-cabin, the canoe and the prairie-wagon.

Conflict between New England and Old England Patterns

But the ideas did not go untested. In Ontario, and to a lesser extent perhaps in Nova Scotia, they had to fight a body of ideas that may fairly be represented by the public schools and grammar schools of England. The Constitutional Act of 1791 was designed expressly to introduce as much as possible of the English Constitution and English social forms into Upper and Lower Canada. It provided for an hereditary aristocracy and for the endowment of an established Anglican Church. Though much of this never became effective, English Governors and immigrants and the official class generally, together with some of the Loyalists, endeavoured to shape colonial life to the English social forms of the time. Bishop Strachan in Ontario for years fought stoutly to establish the whole Anglican system and the foundation of Upper Canada College and the Ontario grammar schools were moves in the campaign. The more popular common schools languished until near the mid-century, when the balance turned definitely in favour of New and against Old England. Ontario organised its schools on " American " lines and her model has been copied throughout the West.

But although the grammar schools became high schools under popular control, they continued to be, in the main, schools for training those who looked forward to the university and a professional career. To this extent they continued the European tradition, and their curriculum was built on the traditional European lines.

Conflict between Ideals of Equality and Individual Success

With the growth of population, however, and the wide extension of economic opportunity that have marked the last generation or so, there came a change. The nature of it might be expressed by saying that a contradiction that was latent in the older democratic idea became explicit when resort to the high school became general. The same contradiction is becoming increasingly apparent in American life generally. It concerns the conflict between the popular democratic ideal of equality, as that is interpreted in America, and the equally popular bourgeois ideal of individual " success."

In its application to the school the ideal of equality calls for the broad common highway rather than for the selective " ladder." Besides, the simile of a highway is less suggestive of painful and persistent effort than is that of a ladder. The elementary school had always been, in American tradition, a free common school, and application of " grading " to it only accentuated its general character of a common and equal march. Milestones were planted along the highway, but young democracy still marched abreast past them. As facilities were extended into high-school grades the tradition passed with them and " making the grades "

was apt to be regarded there too as a normal right, falling due like an insurance policy with lapse of time, rather than as an achievement for the more able. Weaker travellers might indeed have to make more than one effort at the stiles, but they were on the same highway with the rest and might be expected to arrive in time. And why not lower the top bar of the stile a little so as to give them a chance and so avoid breaking the solid front of advancing democracy?

It would be untrue, perhaps, to say roundly that Equality frowns upon Brains. But it is very sentimentally inclined towards worthy Dullness and disposed either to lower the bars or to find a way round through "elective" subjects. Moreover, a popularly controlled system provides opportunities for the many to redress by pressure from outside the inequalities of standing which may arise from difference of abilities within the school. Much current ingenious theorising about curricula and "adjustment" of pupils wears a suspicious air of "rationalisation," of the desire to maintain the dogma of equality at all costs. Moreover, the need to assimilate non-British immigrants as quickly as possible to the general population, a need that is particularly felt in the West, works in the same direction. And the tradition of detailed prescription of course and textbooks which has already been explained reinforces very effectually the influences of democratic equality.

The concept worked well enough in the past, partly because it expressed an urgent need of a pioneering people, the laying of a firm common basis of culture, and partly because, in a land of wide opportunity, school training had, in any case, no very obvious bearing on economic and general success. Highly popular stories of successful men often delighted to emphasise the lack of school training in their heroes.

But with the "closing" of the frontier and the sharpening of competition that followed it, the bourgeois motive of success was inevitably thrown into contrast with that of democratic equality. High-school training, and, if attainable, university training too, now tend to become much more definitely avenues to "success" and a career. The cash value of a high-school education has even been worked out by sanguine and indefatigable statisticians, and the lure of economic success is more and more held out, overtly or by implication, by both teachers and parents, as a stimulus to assiduity at school. The clouds of depression have, for the moment, dimmed the brightness of the landscape and belief in the school tends to decline with the increase of unemployment. But the sun will shine again and faith will return with the rise of stock-prices in Wall Street.

English people, especially, have no reason to be contemptuous of such a motive. It has had a much longer history in England than in America, though its operation may have been more decorously covered under a quickly assumed cloak of gentility. It appears to be working strongly enough now in the conditions

that have been created under the Education Act of 1902. In America its appeal is all the stronger because hitherto the secondary school has not set itself, as in Europe, to produce the universally accepted type of a cultural *élite*. The determination of an *élite* has been left, like so much else, to be settled by popular acclaim, and democracy has agreed to accept as its model the economically "successful" man and the "big executive." These are still the real leaders of society; the award of titles in Canada has been such as to emphasise rather than correct the tendency.

The Standard of the Average

Standards of social valuation, then, work back upon the school and the university. Faculties of Commerce flourish in most Canadian universities. As the motive of success becomes increasingly operative in the school it must come more and more into conflict with the forces of equality. But these latter forces are strong with the strength of the average. Political tendencies in Canada, under the influence of depression, are setting strongly in the same direction. Hard-hit farmers and suffering workers alike give expression to sentiments which might be called socialistic if they rested on any worked-out doctrine, rather than upon a sense in the individual that he has been cheated of his due and is entitled to use the common power to win it back.

If there is a straight fight between democratic equality and bourgeois success in the schools the former is likely to win. In the circumstances it may be well that it should, for the consequences of a victory to the other side are not pleasant to contemplate. The true way out for Canada is an abandonment of both in a transformation and revising of ruling values, and in a consequent resolute effort to achieve a real organic society with an adequate and stable culture determining its functioning and controlling its values. It will be suggested later that a new and much more subtle interpretation of equality is called for, one that abandons entirely the worship of the average and turns to a profounder Platonic idea of a functional plan of life, affording and calling for the full release and perfecting of a wide diversity of human powers.

At the moment, however, the norm of the average rules the schools and stands in the way of that thoroughgoing diversification and sifting at the secondary level which, sooner or later, must come. Some consequences of this domination may be noted.

The Ritualisation of School

In the first place, the abler pupils tend to be unsatisfied by what school can offer and indisposed to seek "success" along cultural lines. Things are improving in this respect as teaching improves, and as classification becomes more diversified and wider ranges of cultural opportunity are opened up. But talent is still too much driven to look for success in the field of economic action

outside and beyond school. In this field it is the impression that a man can make, rather than what he truly is, that tells. He must be able to " put it across," " to get away with it," " to sell the goods." This spirit comes back into the school in the form of " getting by," of doing enough to pass muster and doing it, not to achieve real understanding or excellence, but to pay the price exacted by the system. So the tendency to ritualisation of school, already strong through the meticulousness of central prescription of textbook and syllabus, is still further strengthened. School years tend to be looked upon as a laborious and long-drawn-out ceremonial of initiation leading up to the ticket of admission to the real chances of life. The prominence given to " graduation " and to the award of certificates and diplomas at the end of the high-school course accentuates the mischief by encouraging in pupils the idea that it is the diploma which confers value upon the course rather than the other way round. So the " preparatory " value of education is stressed as against its inherent value as a guarantee of fullness of life. With the sharpening of competition the length of the period of ceremonial endurance increases and where a high-school diploma was once sufficient a degree is now necessary ; where a B.A. was once enough, there will soon be a demand for Ph.D. Indeed, the cult of the Ph.D. is a typical outgrowth of this situation.

The effect of it all on real standards of education in school and university can easily be imagined, and there are, as yet, no signs of the diminution of the mischief. In truth it is deeply rooted in the whole scheme of values of the prevailing social and moral order, and all plans of " reconstruction " which fail to take this into account are mere visionary fancies. Such plans are abundant enough just now.

Here again England has no grounds for any show of self-righteousness. The same tendencies are to be observed there and they may well be intensified, as relatively fewer of the population are able to look forward from the first to a life of economic security. We have realised all too little—though we had the example of Greek *scholē* before us—how intimately the finer achievements of a liberal education are bound up with economic security. America and the stress and confusion of modern times are now revealing the truth to us. Liberal education for a democracy is unattainable without some guarantees of such security. If they are not forthcoming, the best of aims will always be deflected and the potentialities of culture will be perverted to the ends of the economic struggle. The problem in America, as in England, is not, at bottom, educational in the formal sense. Nor is it even political or economic. It is moral, concerned with the working out and acceptance of a scheme of life-values in terms of contemporary conditions. The secondary school must play its part in bringing this about, but conversely the secondary school cannot come into its own till this has come about. In any case, the secondary school fails if it is not in the centre of the battle-ground.

An Illustration of the Domination of the Average

We may conclude this section with a timely illustration of the way in which the spirit of democratic equality works in determining the conditions of secondary education. It comes from Alberta, where a high-school inspector recently gave particulars of the time taken by high-school pupils of the province to complete the four high-school grades (IX, X, XI, XII). The percentages were :

44·6 per cent. completed the whole in four years.
30·7 per cent. had taken five years.
24·7 per cent. had required more than five years.

These figures refer, obviously, only to pupils who complete the whole course. The interesting thing is not the figures, which are normal enough, but the conclusion drawn from them by the writer, who quotes them in an educational journal. He says : " Since more than half of the students take five years or more to complete the work of the four grades, and since 25 per cent. require more than five years, the term ' Four Year Course ' is a misnomer." The course, that is, is in reality a five-year course and should be made such officially.

There are several points here that will strike English readers. In the first place, there is the universal habit of reckoning in " years " —the pipe-lengths. Many English teachers would be guided rather by the pupil's progress and would put him to School Certificate when he was ready for it, regardless of the " years " spent. But more significant is the assumption, so axiomatic that it is not felt to need any defence, that a course must be shaped to the average. There are English teachers who would feel that if nearly 50 per cent. can complete a four-year course without mishap, the course is very well adapted to its purpose. Of the last 25 per cent. who take more than five years they might be disposed to ask whether these should have entered upon such a course at all. Further, they would argue that if any extension to five years is in question, the extra year should be given rather to further work with those who have shown their fitness for it, than to lame dogs who need assistance over the stiles.

The significant thing in the illustration is the lack of any serious appreciation of the *selective* function of the secondary school. The example could be paralleled at the earlier stage of high-school entrance where there is the same lack of selectiveness. What dominates, therefore, is the ideal of the common broad highway. If the stiles are difficult, either they must be eased, or the time-allowance must be extended. So far as possible, all must breast the tape, and laggards are a sign that the pace is too hot.

Again, if this is a fair representation of the underlying thought, one is stimulated to reflect on democratic equality in higher education, and on the probable destiny of universities in such conditions.

It should be added that the illustration is offered here not at all by way of criticism, but to illustrate real and significant differences between English and Canadian thinking on the purpose and administration of secondary education.

Summary: The Formative Ideas of Secondary Education

We may sum up, then, the formative ideas which have gone to the making of Canadian systems of secondary education as:

1. Passionate attachment to an interpretation of democratic equality which places the emphasis on solidarity, and expresses itself in education in standards which have regard to the uniform progress of the average mass rather than the achievement of high excellence by the few.

2. Equally strong attachment to the small local unit of popular control, the school section, an attachment which, while it accepts minute prescription from the centre of the details of school routine, resists tenaciously *administrative* consolidation of the small units in larger areas.

3. A disposition to think of education in quantitative rather than qualitative terms, as a single-track broad highway permitting of adaptations and diversifications only within the common track.

4. Willingness to accept "expert" detailed prescription from the centre, springing perhaps from the conditions of pioneering days when a uniform discipline had to be imposed to safeguard the very elements of civilised knowledge and habit.

5. The "externalism" of the pioneering mind, that is, the disposition to allow life and action to be determined by outside conditions rather than by inner reflection. This character has been accentuated by the necessities of economic expansion. In education it expresses itself as a faith in the "machine," in subordination of the teacher to the system, in a strong belief in "science" and "business methods" in administration, and generally in a tendency to assimilate the school to the industrial "plant." More will be said of this quality later.

Thus equipped, Canadians have been occupied in working out their problems of administration through changing conditions of time and place. The main task, perhaps, has been the adaptation of the standard unit, the local school section, to novel situations. The wide areas of the prairies, sparsity of population, the economic vicissitudes of a country so largely dependent on its export trade in primary products, the mobile character of the population, the assimilation of non-British elements, the growth of cities—all these have presented conditions very different from those of the New England village.

At the same time the organisation of a central Department has had to go on, with its resources in men and money often severely over-taxed and attended always by the danger of over-expansion, a danger which the Prairie Provinces especially have not avoided.

Some modification of the school section idea has been worked out, of necessity, in the towns, where larger schools and diversified organisation are possible. But even there the large school seems very much like an aggregation of little red schoolhouses in modern form. Moreover, in a city like Montreal, the Protestant school system offers little more than the single track through elementary and high school, and this is controlled by no fewer than nine distinct Boards, most of which offer resistance to proposals for unification. Conditions are better in Ontario, where separate Boards for high-school education exist. But endeavours to create them in the West have so far failed.

All the lineaments that we have described become intelligible in the light of these conditions. The profound differences between them and those under which a modern system of education has grown up in England must always be kept in view. Broadly, it may be said that in England society preceded the school; in Canada, school and all the basic essentials of civilised life had to be built up together. And deliberately, as planned, constructed things, set going often in a great hurry. Can it be a matter of surprise that the Canadian school has something of the character of a local post office? For there is a necessary *simultaneity* about Canadian institutions which is the distinguishing characteristic of all colonial life. What Canada lacks, as compared with England, is just History, and nothing but Time can implement that need.

F. CLARKE.

*

CHAPTER SEVENTEEN

Secondary Education in Canada: The Future

IT is time now to change direction, and, having thus looked backward, to look forward. Given these conditions, and the demands of the future so far as they can be descried, what course of development is Canadian secondary education likely to take?

The check to expansion which depression has brought affords both cause and opportunity for review and reconsideration. Some of the probabilities seem clear enough. A growing consolidation and diversification of Canadian life in spite of threats of cleavage; a higher valuation of culture and a more widespread desire for it following upon the achievement of wealth; some diminution of the force of the "success" motive, especially if social action takes the form of providing guarantees of economic security; some restraint of the over-exuberant and over-confident expansionism of recent years; and perhaps the beginnings at least of an era of social and economic consolidation in the direction of a truly organic society; all these seem quite likely. With them may come some sense of the inadequacy of the old methods and equipment in education; a new stimulus to experiment, using perhaps the results of many recent studies in educational technique; certainly a stronger sense of the crucial importance of a supply of well-educated and highly trained teachers, with more permanence and stability in the teaching profession; and perhaps an increasing disposition to look for guidance and inspiration across the Atlantic, rather than so exclusively across the southern frontier.

I. Signs of Change

Increase in High-school Students

Some signs of change are already apparent. Let us take note of a few of them. Note first, a great increase in the numbers of high-school pupils (see appendix (iii), page 603). This increase has not been met, so far, by any radical readjustment of the high-school system. New schools of the old type have been built or additional pupils have been taken into existing schools. The *distribution* of this increase over the secondary grades is significant. The case of Manitoba may be taken as typical, at least of the newer provinces. The percentage increases for the respective grades in the decade 1923–32 are:

IX	X	XI	XII
37	45	95	194

In 1924 about one-third of the pupils who had been in Grade VIII (elementary) in 1923 did not pass on into Grade IX (secondary). In 1932 the corresponding fraction was only one-fifth.

Though the increases may be less great in the East, the same tendencies are revealed throughout Canada. The increase in numbers is much greater, relatively, in high schools than in elementary schools, and much greater in upper than in lower grades of high schools. In other words, numbers in high schools and particularly in upper grades of high schools are increasing much more rapidly than the general population.[1]

Very great increases in upper grades recently are largely due, no doubt, to depression and reduced prospects of employment. But the whole tendency is likely to survive the depression. The financial problem it presents is, in the long run, less acute than the pedagogic problem. So far the increase has just been received into the existing system and there is little sign that its occurrence has given rise to any movement for radical reconsideration of secondary-school arrangements.

The Unit of Administration and the Responsibility of the Teacher

Movements to enlarge the small local unit of administration arise from time to time, but so far have had little effect. Far-sighted administrators who make the attempt find themselves against a solid wall of local vested interest and ancient prejudice, and retire defeated.

Much more promising is a very general movement within the schools to reduce the number of formal examinations and to throw greater responsibility upon the teacher in respect of promotions and classification. This movement has already been discussed by Prof. Macpherson in this volume (see page 291). It may be hoped that this is the beginning of a healthy tendency to think in terms of schools rather than of grade tests and attainments. But the grade structure persists as solid as ever.

Diversification of Curricula

Akin to this movement is an effort not only to diversify the subjects offered, but to organise a variety of curricula for specific ends. British Columbia, for instance, offers Matriculation, Normal School Entrance and General. Alberta offers six: Matriculation, Normal Entrance, Agricultural, Commercial, Technical and General.

It would appear that efforts to popularise the General Course are not very successful. The experience of Manitoba may be taken as fairly typical. An Inspector of Secondary Schools there reports in 1932:

> "Our present secondary-school system puts a premium on the type of student who is able to read books, listen to teachers and re-hash the material to suit the examiners. Many young people who later will be

[1] The total high-school enrolment in 1931 was equivalent to 19·2 per thousand of the population.

of value to the State do not take to this sort of thing, yet when we try to offer more suitable courses, such as our High School Leaving Course, practically no one takes it."[1]

Such a dictum should be read in connection with what was said in the preceding chapter about the demand that the broad highway through the schools should carry on into the university and that no door should be closed to pupils who had taken a full high-school course of any kind.

The diversification of curricula aims, among other things, at providing richer content of studies for abler pupils. Canadian opinion favours strongly the treatment of bright pupils by this process of " enrichment " rather than by accelerated progress. One suspects here that the " grade-complex " is operating, and that the issue is not really being approached on its merits. " Enrichment " does not meet all the needs ; more rapid progress may be essential to sustained interest for certain pupils and in certain subjects. But the grade system, as it is worked, makes this very difficult to provide for.

Acceleration versus *the Grade System*

However, some degree of real segregation is effected, as when pupils are divided into those who take two languages other than English, those who take one, and those who take none. But this tendency has not gone very far. The general rule is that all the pupils in a grade taking the same subjects march together. Weakness is met, not by breaking the mass-formation so as to cross-classify, but by requiring the weak ones to " repeat the grade." Indeed, cross-classification hardly exists. Even in Protestant Quebec, where the experience is common of a pupil coming to high school from another province or from the United States much below the standard for his grade in French, but well up to it in other subjects, there is no effective plan of special classification. Usually, it appears, such a pupil goes into the grade of his general subjects, making what he can of the French, and counting himself fortunate if he can get a little extra help from his teacher.

However, even so tightly bound a lockstep as this is being loosened here and there. Some attempts at acceleration have been made in Manitoba and elsewhere, while at the Central Collegiate Institute, at London (Ontario), there is a whole large school organised on a basis of individual time-tables and cross-classification. The Principal of the Institute states : " The personnel of no two Groups in any other year than the First Year will necessarily be the same for more than one period of the day." An illustrative case is cited of a boy whose eight daily periods were divided thus : *five* in the Second Year, *two* in the Third Year, and *one* (French) in the Fourth Year.

The arrangement thus provides for very weak and very strong

[1] Compare the experience of Scotland, page 545.—ED.

subjects to be taken at the appropriate level and circumvents both the strain and the burden that arise from massed movement. It can be shown that pupils thus handled reach a good " leaving " standard in shorter time than their fellows in the block-movement schools.

Experiments like the one described may be going on in other parts of Canada. If the practice becomes general, its effects may well be far-reaching. Thus the well-equipped high school, in giving full scope to its abler pupils, may not only be able to take over the work which is now done in the earlier years at the university, but may also carry out a much more thorough sifting of candidates for university entrance. The way is then open for some very salutary reforms in the university itself.

New Types of School

In another field of possible development, that of evolving new *types* of school, very little has been done. The grip of the grades and the passion for the single broad highway are too strong. Junior high schools exist in Winnipeg and in British Columbia, and a movement to establish schools of a similar type is beginning to take practical form in Ontario. Indeed, a few such schools, described as " Intermediate," are already working there. But the junior high school is still generally regarded, American fashion, as a demarcated section of the whole grade series (VII, VIII and IX), rather than as a distinctive school type, *sui generis*.

Most significant in this connection are the new types that are now indicated in Nova Scotia. These will be referred to more fully later.

Vocational Schools

Technical and vocational schools in Canada can be regarded as high schools with a strongly vocational bias and with facilities for taking special and part-time students. The technical school or college as it is known in England is not common, though a school at Brandon, Manitoba (for motor mechanics), and the Technical Institute at Calgary are nearer the English type. Alberta has also some Agricultural Schools quite separate from the general school system.

But Canada generally has followed the American practice of providing for vocational and technical education through the high-school system. The Vocational Schools of Ontario may be taken as typical. Six courses are provided : Industrial, Home-Making, Art, Technical, Commercial and Agricultural. But with any one of these a solid core of " general " studies must be taken. As even the " vocational " studies are only in part practical, the general result in each case is a curriculum such as could be worked out in almost any well-equipped English secondary school. Thus the implied segregation of " general " from " vocational " studies is

less real than it appears to be, and the implication of a distinction is, in itself, unfortunate from an educational point of view.

The South African system of State-supervised apprenticeship, with part-time attendance at a properly equipped technical school, has been instituted only in Ontario, and there only the building trades at present have come under the law.

Rural High Schools

Of greater interest and significance is an effort made by Alberta to meet the really grave problem of providing adequately for the secondary education of children in rural areas. We have seen that any radical handling of the rural problem involves the creation of much larger administrative areas, and that this reform is strongly opposed by the vested interests of the numerous small-school sections. Alberta has tried to apply the principle of consolidation to this problem, as far as it will go, and the result is some sixteen rural high schools. These are schools of one room with a small library and science room attached. Any two or more Boards may combine to institute such a school.

Reports from areas where these schools exist comment frequently on the advantages of high-school facilities within reach of the pupils' homes. But in view of their age and well-grown appearance (in photographs) it sounds a little odd to English ears to read in a Departmental booklet on the subject that:

> "It is a serious matter to send boys and girls away from home at a time when they are most in need of the protection, encouragement and advice which a good home affords."[1]

The Department apparently echoes parental opinion:

> "Parents are unwilling to expose their children at that time of their lives to the uncertainties and temptations with which they will be surrounded in the city or even the large town. Parents are also unwilling to sacrifice the companionship of their children at this age."

Though some of the local reports do hint that "dormitory accommodation" is desirable, the general opinion, as expressed above, does show the serious difficulty of handling this problem in any radical way, as it has been dealt with, for instance, in Southern Rhodesia. One wonders, for example, why the town should offer the only alternative to the small rural school. A genuine, fairly large rural secondary school ought not to be an impossibility. But parents would have to restrain their sentiments and school trustees their local patriotism, and there, apparently, lies the difficulty.

The situation which these schools are designed to palliate, if not to remedy, may be illustrated by a few citations from inspectors' reports of the year 1930.

[1] There is no real parallel, of course, between the ancient habit of an historic country like England and what is possible or desirable in a dispersed community that became a province less than thirty years ago.

The Department itself asserts, in the pamphlet just mentioned, that :

> " It is everywhere agreed that secondary education is a problem beyond the power of solution by the board of a rural school district."

And again :

> " To attempt to introduce into the ordinary rural school, with an average enrolment and all public school grades represented (i.e. I- VIII), the work of any of the high-school grades is a mistake."

A few extracts from inspectors' reports provide the appropriate commentary :

> " In such cases (i.e. high-school work in a school such as is indicated in the quotation just above) both Boards and parents show no inconsiderable resentment if an attempt is made by the local inspector to overrule their will and judgment in this regard."
>
> " Very few two-room schools have the science equipment necessary for the teaching of Grade XI, and experimental work in science is not done. This method of teaching science (i.e. non-experimental) is of very little value."
>
> " Eighty per cent. of the rural schools in this district are teaching Grade VIII work, and just half of that number are giving instruction in the work of Grade IX. . . . Not more than 5 per cent. of these schools teach the work of Grade X. For the work of Grade VIII practically all schools have the necessary equipment and the tuition given is generally satisfactory, but this cannot be said of the majority of these classes in Grades IX and X. Here is the source of constant irritation in many districts."
>
> " I frequently find too much time being devoted to the high-school work in ungraded schools, to the detriment of the work of the junior grades. A teacher under these conditions can do little more than direct the efforts of high-school pupils, occasionally helping with difficulties."
>
> " In the case of Grades X and XI students do nearly all the work without assistance. The teacher frequently assists them after school hours."
>
> " General science is taught without apparatus of any kind in the majority of rural schools. The text is not used at all in some schools, and merely for reference in others, while an unauthorised manual is the main source of information in by far the majority of schools. . . . Composition is slighted ; history is poorly taught and left largely to the care of the pupils."

One inspector comes out roundly in favour of high-school work in these single-teacher rural schools :

> " Except for the laboratory work, which is not feasible in the ungraded school, the pupil in this type of school is possessed of most of the advantages which are in the possession of the student attending the larger high school."

After reading these extracts one can understand better the dominance of examination and textbook, but not so well, perhaps, the quite common idea that defects of secondary education can be remedied by the prescription of improved courses of study.

It is significant that practically all the inspectors bear testimony to the strong local pressure to have high-school grades taught in

the one-teacher school. The fact of such pressure lets in a flood of light on the popular notion of school education in general and of high-school education in particular. It reveals strongly the single-track idea, or, as we might call it, the expanding-book case idea. It shows also the change of outlook that will have to take place in a democratic community before a true remedy can be found. For these parents are actually insisting that the rural population shall have an inferior article passed off on it in the name of high-school education. Examples of the same odd perversion of the democratic mind are not lacking in other directions.

Romantic stories of the achievements of the little red school-house and the Scots dominie in other days lose their point just because they do belong to other days. The little rural school has its place even in secondary education, but it is a place in an organic whole of diversified education, not the place of an impossible reproduction of the whole single track.

The Standard of University Entrance

A similar tendency to that described above has shown itself in times past in the university field. But the western provinces, particularly Saskatchewan, where the issue has arisen most acutely, show stout resistance to attempts to break up and localise university education. Indeed, many are beginning to wonder whether the four provinces are not already over-supplied, with one university each. It seems much more likely that " localisation " will take the form rather of extending the upper ranges of secondary education than of a devolution of university education. Already three-fourths of the entrants to the University of Saskatchewan pass directly into the Second Year, having passed " Senior Matriculation " (Grade XII) at school. The hope is now being expressed that the second university year also may, in time, be passed back to the schools and that the university then, free from what is really school work, may cut down its years from four to three, with a net gain of one year on the whole transaction and an enormous gain in the solidity and standards of its own work. Ontario has moved in the same direction—the equivalent of Grade XII (Upper School) is now demanded for university entrance, with four years thereafter for Honours and three for Pass.

Similar tendencies are showing themselves in other provinces, and if they continue, they should serve to force the drawing of the vital distinction between institutions which can do true secondary work and those which can do no more than impose a travesty of it upon self-deluding parents and trustees.

II. Weakness of the Tendencies towards Change

Of practically all these tendencies to change and movement it may be said that, while they are to be welcomed as evidence of a healthy critical spirit, they are spasmodic, timid and compromising. They avoid, on the one hand, any radical reconsideration of the

grade system, and, on the other hand, any thoroughgoing reconstruction of the system of local administration. The old concepts still dominate and are likely to continue to do so.

Post-matriculation Classes in Schools

A good illustration is afforded by the fate which has attended efforts to institute post-matriculation classes in the schools. Where pupils can matriculate at 15 (and very many at 16), the need for postponing entrance to the university is plain enough. Some of the private schools have succeeded in instituting such classes, their purpose being to provide an interim period during which a pupil may consolidate his attainments, break a little new ground perhaps, and push his studies farther along the lines of his tastes and interests. But the demand for a tangible " grade " reward for all work done is enormously strong and, as most university entrance scholarships are awarded on standing in the matriculation examination, pupils, even in the private schools, will simply repeat the matriculation " year " in order to improve their chances. Apart from this, the demand is wellnigh universal, especially in the State schools, that a post-matriculation " year " successfully carried through shall exempt from the first year of the university. So what is known as " Senior Matriculation " becomes a kind of floating kidney, attaching itself indifferently either to the upper end of school or to the lower end of the university. Frequently it is taken at school for the sake of cheapness and convenience.

If the transfer of the university first year to the schools, to be followed later by the transfer of the second year, were systematically encouraged, and if the schools developed this work on genuine " sixth-form " lines, with less of the " grade-complex " operating, the universities would be able to reorganise their degree courses on a three-year basis and bring about that very necessary differentiation of university work from school work which is still so seriously lacking. But, apart from the step which has been taken in Ontario of demanding Senior Matriculation as the entrance standard for Honour Courses, little or nothing is being done to take advantage of the increased capacity of the schools. The grade-complex and the idea of the single track remain too strong.

Persistence of Mechanistic Ideas of Education

The obvious solvent is a substitution of *functional* for *serial* thinking in respect of both schools and pupils. The organic whole of the distinctive school and the organic whole of the individual pupil are the true working concepts. But " new " school types are still no more than variants of the universal grade theme, and " individualised " treatment of pupils is still no more than some intermingling of the standard grade dietaries. Varying the metaphor, one might say that the system shows a curious lack of power to develop living arms and legs ; it can only use the existing meccano units to invent more ingeniously jointed rods.

This persistent habit of thinking in terms of mechanistic units is not unrelated to the pioneering history of the continent. The great expansion took place during the industrial revolution, using the concepts and inventions and actuated by the motives of that great movement. Spectacular successes in the material field have been achieved under these conditions and the habit of externalised and mechanised thought has become general. Nor are there any ancient Oxfords or Winchesters, rooted in quite another conception of culture, to give pause to this false universality. French Quebec might have served this purpose if the difference of religion had not interposed a barrier. And French Quebec is not France.

The Idea of Selection

Moreover, truly organic thinking about schools and pupils would involve another profound change in habits of thought for which Canadian opinion is hardly ready. It would imply thoroughgoing *selection* and *adaptation*, special arrangements for the able and special advantages for this school as against that. It would involve, for instance, a full recognition of the fact that secondary education cannot be given in the little country school, and of the further fact that universities exist only for the able few. But all such ideas run violently counter to the prevailing interpretation of democratic equality as we have described it.

The Responsibility of the Teacher

Further, the general notion of the teacher as the explicitly instructed agent of the education authority would have to undergo profound modification. Instead of being a local official analogous to the postmaster, the bank manager or the customs officer, he would have to become a much more independent and responsible creative worker amid the resources which his particular situation affords. Neither the teachers nor public opinion seem ready for this change yet, though the numbers are increasing of strongly individualised school principals who do take their own special problem firmly in hand and take full command of available resources for handling it. Before any habit of throwing such responsibility on teachers can become general, the excessive mobility of teachers will have to be checked, greater security of salary and tenure will have to be achieved, methods of training will have to undergo change, and the attitude of thousands of local school trustees must go through something like a revolution.

Meanwhile, it remains broadly true that where, in England, one would ask a youth, " Where do you go to school ? " one would ask in Canada, " What grade are you in ? "

III. The General Lines of Reconstruction

We are now in a position to ask the final question : What may be the probable lines of reconstruction and adaptation in the future, in view of all these conditions ?

Modification of the Graded Common Highway

We have seen that the ideal of the Graded Common Highway still dominates. In some form or other it is likely to continue to do so, for it is much too congenial to the North American temper ever to be wholly superseded. Nevertheless, there are factors making for change. Financial pressure is one. There seems to be small likelihood in the long run that the ideal of Secondary Education for All will break down through financial inability to sustain it, provided the policy is resolutely pursued. Financial pressure is much more likely to have the effect of stimulating reconsideration of policy ; of the objects upon which money is spent. It may, for instance, stimulate an increase in the number of schools of junior high-school type. Such a tendency may be helped by a not wholly unhealthy disillusionment with conventional secondary education as a road to success. That notion, as we have seen, is of comparatively recent origin, and thousands of unemployed juveniles offer to-day an ironic commentary upon it.

In this connection one immediate result of financial pressure is worth noting. Several provinces have either adopted or are contemplating the step of imposing fees upon pupils who fail to complete the high-school course in a reasonable time. This is intended to deal with those weaklings who " park " in the high schools as a refuge from the storms of unemployment, and occupy places which could be better filled. It is a kind of negative acceleration, and affords hope that soon recourse will be had to the much more helpful form of positive acceleration whereby the passage of able pupils through elementary and high school will be expedited.

But other factors of a more permanent kind than financial pressure are at work also. There is no doubt that the ideal of Secondary Education for All will be maintained, but every reason to doubt that this can be done without considerable refinement and adaptation of existing technique. The universities, too, are becoming increasingly alarmed at the danger of swamping, and they have their futile and wasteful " parkers " too. Moreover, the intellectual resources of the secondary-school system grow steadily and could be used to better purpose. There is a growing sense of the need for better arrangements at the " Hadow " age-period for all pupils, and the true relation of secondary to vocational and technical training is beginning to be understood.

Modification of the Social Structure

But behind all these factors is the great enigma of the future of Canada. The old, facile, " all-come-right " optimism of a few years ago has noticeably diminished, and a healthier speculation which admits of doubt has set in. The true magnitude of the task of forming a stable organic community of this ribbon of provinces, each autonomous in its educational policy, stretched across from ocean to ocean, is now better appreciated. Cleavages

of economic interest have to be faced more and more, as well as cleavages of race and language and religion, and it would be true to say that no question of current Canadian politics is without its educational bearings.

For a country so situated, and so dependent on its export trade in primary products, much will depend on the course taken by economic reorganisation in the world as a whole during the next few years. But much more will depend on the fate of industrial democracy in the coming age. That form of social organisation is of much more recent origin than a generation insensitive to tradition is always able to appreciate, and its great citadel in this continent has been run up with suspicious, though characteristic, celerity. A chastening of optimism ; a return to inwardness from the feverish bustle of manipulating outward things ; a growing disillusionment with wealth when once achieved ; a growing shame and resentment against corruption and graft and the spectacular greeds and meannesses which festoon the temples of success ; a new yearning for charm and beauty amid the ugliness of money-making ; a new reluctance to hand over unspoiled children to the all-consuming Moloch—these things may bring about a real shift of values that may have vast but unforeseen effects on society and education.

Since secondary education, pursued by whatever technique, is the main instrument by which a society guarantees the conscious establishment of appropriate values in its youth, the future of secondary education in Canada depends very largely on the unknown issue of movements which are now only beginning. But on any view it seems unlikely that the old interpretation of democratic equality can persist. It must prove much too costly, too paralysing, too much out of register with the actual social facts in the strenuous years that lie ahead. What made it possible in the past was the comparative simplicity of the problems that had to be met. Hard work and tenacity were usually sufficient, supported by the existence outside the school of a vast area of free opportunity to success in which school achievement was not particularly relevant. But these conditions are changing, and the emergence of a more stratified and deliberately organised society is beginning. The teaching profession affords an illustration of what is going on. Not so long ago it was open to any ambitious youth who was ready to teach for a few years until the chance of a better career opened out. Now the standard of qualification tends to rise to a point where this is much less easy, and this, combined with relative decline in other openings, is making of teaching a more closed profession. The same thing has happened, or is happening, in other professions.

Though the fact is denied, with a passion which is itself an admission, that a proletariat exists in North America, no denial can conceal the truth that the old elastic " frontier " has gone. Now, as in Europe, the great bulk of the population will have to look forward to a lifetime of, at best, moderate wage-earning.

Hence a new interest in economic security and in stabilising general working conditions at the highest possible level.

Some stabilising of the economic order seems inevitable, and this involves changed habits of consumption, and perhaps a new and better attitude towards leisure. But all this depends upon the emergence, under stress of adverse experience, of a modified order of values. A new economic " boom " might administer a check to healthy tendencies in this direction which are now in evidence, but the ferment will go on. There are large spiritual reserves among the people of this continent, and the great swing-over from pioneering conditions to those of a settled and mature social order must take time.

Secondary Education as an Instrument of Social Control

In any case, it is clear that an age of revision and consolidation lies ahead. The system of secondary education will be a main instrument of social control for this purpose, and we may expect that it will be used with much more deliberate intent and with much more clear-sightedness of aim than in the past. In particular its functions will be :

1. The maintenance and development of the whole scheme of reigning values, probably with a livelier sense of continuity with the past, and with a more critical attitude generally.

2. The " sorting-out " of the population by educational provision designed in the first place to select and classify, and in the second place to meet diversity of needs with diversity of facilities.

Canada's Opportunity for North American Leadership

In regard to the first of these we need always to keep in mind the conditions under which the continent has been settled. The strong initial revulsion from Europe, re-stimulated from time to time ; the influences of the industrial revolution ; the character of immigrants seeking a land of opportunity and only too ready to cast off old, unhappy far-off things ; boundless facilities for exploitation and the quick accumulation of fortunes ; high mobility in a land of easy movement and swift changes of opportunity—all these have conspired to produce a cast of mind of which pragmatism is the philosophical rationalisation. Under-estimate of the past ; lack of consciousness of the living past still at work ; an externalism which concentrates on Action in the sense of causing outward things to change ; some atrophy of meditative habit and minimising of the value of " pure " knowledge ; faith in the organised machine and the " gadget " even in the field of social control and social " reconstruction "—such are the outstanding traits. Their virtue lies in the necessary emphasis on the forward view ; their weakness in the impoverishment and shallowness that result from lack of a conscious sense of a long inheritance.

So life is made to look too easy, too plastic to the moulding hand of man. Europe's misfortunes and failures are construed

as the result of perversity rather than as of a highly complex history, and America's good luck is construed as superior virtue. That "undefended frontier," for example, with its squads of immigration officers and customs officials is as much the result of fortunate chance as the Franco-German frontier is the result of a malign fate. But the Atlantic now is becoming little more than another Rhine: the North American continent comes inevitably into a world-system; and "old-country" social and intellectual conditions will take shape. Pragmatism will lose some of its perky and rather blind self-confidence, and a stronger sense of a common civilised inheritance will appear. Canada is well placed as a guide for the transition. Not only has she the great French-Canadian tradition, Roman in origin and classical in spirit, to serve as model and anchorage even to those who repudiate some of its forms: she has the British tradition also, purer in some respects than it is in England itself. Canadian institutions have stood the stress of depression far better than those of the United States, and if any copying is to go on in the near future, Canada is much more likely to be the imitated than the imitator.

As we have seen, Canada has never gone anything like so far as the United States, in school and university, in breaking up and diluting the great intellectual tradition of western civilisation. The English observer might think Canadian schools and universities highly "Americanised" until he looked into the very real differences. Latin has held its own almost too well; courses in history are generally better balanced and more comprehensive than those of England; the fundamental sciences are thoroughly handled in the fully organised schools, and mathematics has built up a strong tradition of its own.

For this solid continuity, Nova Scotia, that useful reservoir of teachers and educational administrators, is very largely to be thanked. Its tradition springs from a combination of Old Scotland and New England, an admirable mixture for the task that had to be done.

So the prospect, as far as curricula and teaching are concerned, is hopeful. The great need is to raise the standard of education and training of teachers generally and to achieve continuity and permanence of supply. Then it will be possible to devolve responsibility for adaptation of facilities upon the schools themselves, schools will become more highly individualised and more experimental in spirit and the organic will begin to take the place of the organised.

IV. A Scheme of Selective Secondary Education for All

The situation is much more difficult in respect of the second of the two functions of secondary education to which we have referred. The "sorting" process which, as Plato has shown once for all, is essential for the purposes of a truly functional society, cannot proceed unimpeded without a change in the present

notion of democratic equality and without some abatement of passionate devotion to the small school section as the unit of local administration. The grade system and Canadian liking for the large " omnibus " school are much less serious obstacles. It should not be impossible to adapt them to more varied and elastic functions, and Canadian usage is not at all likely to surrender them easily. But the idea of education right through as a broad common track, requiring that provision made for some shall be available for all, really is a serious obstacle, and the idol of the Average will not easily be dethroned. The same is true of the other idol, that of the Little Red Schoolhouse, locally provided and managed. Democracy is quite capable of insisting upon the supply of an inferior article just so that it may be accessible to all, and to treat as indefensible favouritism the supply, at public expense, of a rarer article which only a few can appropriate.

The Emergence of the Junior Secondary School

Nevertheless, there are some signs, tentative and confused as yet, that the need for better means of selection is being appreciated. The problem of the rural child still resists drastic treatment and will continue to do so until recourse is had to boarding and the operation of a larger unit than the small school section. But the idea of the junior high school is developing, especially in the towns, though this type of school is still thought of too exclusively in serial terms, as a special form of provision for " intermediate " grades between pure primary and serious secondary.

So strong is the prevailing idea of a common course for all. But Nova Scotia affords a hint of some appreciation of the two distinct functions of this type of school (see Chapter Fifteen in this section, page 547). It proposes to offer grants both for pupils taking the " junior adolescent " grades (VII, VIII and IX) in the normal way, and for pupils taking a " rounding-off " course, specially adapted to their particular needs. The idea of two parallel schools such as the secondary and the central school in England, diverging from the same point, is not at all well understood in Canada. But these provisions in Nova Scotia seem to show that the essence of the idea is being grasped.

It is not likely that Canada, in view of its habits and traditions, will follow the English model of distinct schools for each of these purposes. More probably one large school will make provision both for those who seek preliminary training for more advanced secondary work and for those whose schooling ends with the junior secondary stage. But, for the supreme purpose of *selection* it is highly important that the essential distinction should be grasped. If it is, and the distinction is applied in practice, the essential break in a rigid grade series will have been made, and the way will have been opened for an organic treatment of the problem.

It will be necessary, of course, to provide for much freer transfer between one type and the other than at present exists in England.

Canadians are likely to take note of recent evidence that the entrance examination in England is a much less satisfactory selective instrument than is a year or so in school under " secondary " conditions. The technique has still to be worked out, but there can be little doubt that the Canadian way, unobstructed by the *damnosa haereditas* of a social class tradition, will be to put all alike into the observation chamber of the junior high school and carry through the necessary diagnosis and sorting there.

The small rural school, when competently conducted, might well play its part in the vital sorting process, provided, of course, that facilities exist for speedy transfer as soon as the promising rural pupil has shown his quality. This involves, inevitably, the creation of a larger local administrative unit and the abandonment of the idea that full secondary facilities can be made available at everybody's door-step.

The Emergence of the Junior College

At the upper end of the secondary scale also some interesting developments are promised. Saskatchewan affords an illuminating example. This province has several " junior colleges," such as are found here and there in other provinces. One of these, at Regina, having lost to the State schools the bulk of its pre-matriculation pupils, conceived the plan of developing post-matriculation work along the lines of the Arts degree, and sought recognition for this purpose from the University of Saskatchewan at Saskatoon. The situation contemplated was thus not unlike that of a small English university college preparing students for the External Degree of London University, a model which has been followed with dubious results in South Africa and New Zealand. One can trace here again the influence of the desire to have higher education provided at home, at whatever risk of dilution. For it was not pretended by the Regina institution that it could offer facilities equal to those at the university. Students would pursue only certain selected courses and the full university atmosphere would be absent.[1]

The Carnegie Foundation was called in to report, and its representative, Dr. W. S. Learned, condemned the proposal without reserve, arguing for the maintenance of a few strong well-equipped university centres and urging that institutions like that at Regina should set themselves to cover work, really higher secondary in nature, that is now being done in the first two years at the university. The same level should be sought by the " collegiate institute " as the largest and best-equipped secondary schools are called in Ontario and some of the western provinces.

The university would thus be free from the trammels of secondary-school work, could cut down its requirements from four to three years, and could concentrate upon its proper function of the furthering of advanced scholarship. Reform along these lines is proceeding

[1] A somewhat similar situation appears to be developing in Manitoba.

in some parts of the United States, particularly in California. Like the junior high school, the junior college has a double function, that of rounding off the education of those who will go no farther, and that of preparing candidates for higher work. If some such reform could come in Canada it would have a strong selective influence at the upper end similar to that of the junior high school at the lower end. The less satisfactory type of student would be drawn off from the university; the more satisfactory would be stimulated and helped to work at his full capacity, would be singled out in that very process from his less able fellows, would do his preparatory work under more suitable conditions for a mere youngster than at the university, and would come to the university ready for a flying start at serious work. And all this could be accomplished by a capable student in no more actual time than he now takes to reach a much lower standard with much loitering by the way.

Three "Sorting" Stages

Some of the universities are so inured to the present routine of first- and second-year work, and the schools are so little practised in the handling of post-matriculation work, that reform may be long deferred. But it is becoming daily more clear that the accepted divisions in the grade series, the stiles along the track, are wrongly placed. They are out of accord both with the resources of the schools and the needs of a functionally ordered society. Normally there is one at the end of "elementary" education (Grade VII or VIII) and one at school-leaving stage (Grade XI). Instead there should be *three*, placed as follows:

1. The "Hadow" stage, where the main sorting occurs. The Canadian system as at present organised could not fix this by age, but would probably begin it from the end of Grade VI. The terminal point, for those who go no farther, would be Grade IX.
2. The school-leaving stage: end of present Grade XI.
3. The university-entrance stage, representing a normal two years of work beyond Grade XI.

Development along these lines would make Canadian secondary education approximate much more closely than at present to that of France or Germany. England is moving in the same direction with the rapid increase in the number of pupils who take Higher School Certificate. The result would be to give a scheme of Lower, Middle and Upper, but more extended and more diversified than that which now works under these names in Ontario. And most important of all, the three stages would together constitute a continuously operating sorting instrument rather than a single common track for all.

Vocational Education

At least one further advantage might ensue from the evolution of such a scheme as this. It should become possible to organise

vocational and technical education with much more independence of normal secondary education than at present, and yet with well-marked stages or levels corresponding to the various levels of the secondary system. In a fully developed organisation the pupil who leaves at any level, Lower, Middle or Upper, would find available for him full-time or part-time facilities for vocational training, suited to his attainments in general education and to the vocation in which he would now have a direct interest. These facilities should be frankly and unreservedly vocational. The ordinary secondary schools should give up the pretence of offering vocational training *eo nomine*. Their concern is with general preparation and with certain special adaptations of high-school courses (such as are in operation in the Ontario schools) which have as their object not so much direct vocational training as vocational self-discovery.

Organised industry and commerce are, in Canada, even more slow than they are in England to recognise their obligation and interest in this matter. The State, acting by itself, can provide vocational education only expensively and inefficiently. The undertaking is clearly a co-operative one, with the school as an adjunct to industry and the State as friendly supervisor and stimulant. One of its functions would be to organise, along with the industries, a series of certificates, attesting standards of attainment at each level. The operation of such a system has had a useful effect in giving coherence to, and providing standards for, organised courses of study.

V. Conclusion

An attempt has been made in the foregoing pages to give some account of the working conditions of Canadian secondary education as it proceeds to-day, to hint at some of the historic influences that have shaped its forms, and to forecast very tentatively the probable lines of its development in the near future.

National Reform by Autonomous Provinces

Canada is like the British Commonwealth itself in this, that any cultural and spiritual unity it can achieve through education will have to be brought about, so far as governments are concerned, by the voluntary co-operation of autonomous authorities. The whole constitution of Canada is built on that foundation. Quebec entered Confederation with a guarantee of the cultural, spiritual and educational liberties of its great French Catholic majority secured to it by a system of provincial autonomy which can be changed only by the British Parliament with the unanimous consent of all the provinces. Hence action by the Federal Government can hardly be expected. Even its assistance to technical education takes the form of grants which the provinces spend.

Consequently the achievement of unity—of a genuinely individualised Canada in the British Commonwealth and in the

family of nations—depends mainly on the character of the pressure which is exerted by the people themselves. The urge towards unity has not been strong in the comparatively easy conditions of the past, while the provinces have been building up their own structure with much jealousy towards outside interference. But it is growing now, under pressure of economic necessity and the real danger of a cleavage of interest along enonomic lines. Canadians are increasingly stimulated by a sense of the need to assert a distinct North American individuality as against the huge republic to the south. The British connection may have a growing importance in this matter, provided that Canadians are left to feel that they may take their good wherever they find it. Any suggestion of patronage or pressure would be strongly resented. They are acutely aware that their culture, however British in substance, must be North American in colouring.

The Passion for Equality

Perhaps the most distinctive North American trait in this present connection is the passion for democratic equality which has already been insisted upon. Though it is quite compatible with little snobberies (and the great snobbery of not wishing to be thought behind the United States), and though it is often applied blindly and harmfully, it is still very real. Its good effects can be appreciated by those who know of the influences of educational inequality in pre-1902 England, and who see the widespread diffusion of educational opportunity here. The school is, in truth, a real barrier against mischievous class-feeling.

But it is also a barrier against healthy diversification of functions and capacities, and the ordering of a coherent functional society that should result from such diversification. The appearance of stratification and of dominance by an *élite* in older societies is not well understood. Such appearances are interpreted as evidences of caste, and it is not realised that a society may determine its functional stratification on sound democratic principles. The fact that so many leaders of European opinion, of literature and art and statecraft, have been men of humble origin is not taken at its full significance. Insistence upon *standards* is apt to be confused with a departure from democratic equality, and so we get the tendency to demand that standards should be low enough to give everybody a chance.

More serious still is a tendency during these years of distress to assume that it is an obligation upon authority to provide for the individual's needs with no corresponding obligation upon him. This is perhaps only temporary, but it shows where an overdriven doctrine of equality may be pushed.

The Reinterpretation of Equality

The remedy is not to discard the doctrine but to reinterpret it in Platonic terms. That is, to view it, not from the standpoint

of a congeries of individuals, each claiming to be a discrete mathematical unit, but from the standpoint of an organic and highly diversified Common Good, where each can find both his own special medium of self-fulfilment and the demand for his best services in that medium. The first idea was natural enough for nineteenth-century pioneers with a vast continent before them. But it will not serve in days of great transportation and power-trusts, of huge concentrations of capital, of great urban centres more and more sucking the wealth out of the land, and of a shrinking Atlantic that now more and more unites the fortunes of Europe with those of America.

Circumstance and opportunity did not evoke such an idea in the provincial days of last century. But many influences are working for it in the œcumenical days of this century. If that is so it is the one great thing of which those who plan and direct the processes of secondary education must take account. Take, for instance, that matter of an *élite*. Canadians are realising that however much they may talk of equality they will have a directing *élite*, whether they will or no. Consequently, it is a matter of some importance to know by what criteria the *élite* is to be determined and by what selective processes it is to be constituted. This is a question of the ruling values, and clear voices in that great debate are beginning to be heard, not in Canada alone.

Canada's Spiritual Reserves

North America, and Canada with it, in spite of the loudly preached Gospel of Change, may have accepted all too easily the finality of industrial democracy as the modern form of society. Canadians have grown up with it, and as an established North American community they have hardly known another world. But unless the conception of a standard of life as a multitude of swiftly changing possessions persists, unsatisfying as it is, the present forms of industrial democracy may prove quite inadequate to the Art of Life as it may come to be understood here.

It is the peculiar task of secondary education to foreshadow and prepare for these changes, equipped as it should be with all that is abiding in the inheritance of the past. Canadians are marked as a people by strong common sense and abundant vitality. One cannot live long on this continent without realising that, just as there are vast economic reserves in the land, so there are vast spiritual reserves in the people. These are still largely untapped and the period of bewilderment at the new demands has not passed yet. But it can hardly be doubted that a people which has had vitality enough to work out a great system of secondary education on a broad common level will be equal to the task of reinterpreting it, as occasion demands, on a higher level. For the rhythm of vitality goes on ; creating, enjoying its brief pause of satisfaction, and then recreating what itself has made.

Both space and time offer more scope for the long rhythm

in Canada than in Europe. Much more of the long road lies ahead. There is exhilaration in the thought, and promise in the contemplation of what has already been achieved.

F. CLARKE.

APPENDIX

(I)

Note on Finance

It has been thought well to omit from the above study any discussion of the finance of secondary education. Methods of accounting and control vary as between one province and another, and where so many pupils take secondary grades in small single-teacher schools it is not easy to disentangle the costs of secondary education as such.

The whole subject is really one for a separate study. For many reasons it would be an intricate one, as figures would have to be subjected to many checks and corrections before they could be regarded as fairly representing all the facts on a sound comparable basis.

The cost per head of secondary education is not easily ascertained, but it seems to be in the neighbourhood of $135 or $140. In comparing this with the English figure regard should be had to the much more specialised character of the term "secondary" in England. Much post-primary education in England which is not classed as secondary would be so regarded in Canada. If the Canadian definition were applied to English conditions, cost per head might prove to be approximately the same in the two countries.

Fees are charged in Quebec, Saskatchewan and British Columbia, and in Manitoba and Alberta they are charged for Grade XII only. Most provinces take authority to charge fees, sometimes up to the total cost, in respect of pupils whose parents are not taxpayers in the area of the authority which provides the school they attend. Since the main financial burden falls on local taxes this factor operates to retard the transfer of promising pupils to the larger and better-equipped schools. A system of bursaries is not general. There is some ground for the opinion that fees might be more generally charged and that the revenue thus accruing might be used for a more extended system of bursaries. But it may be judged from the preceding chapters how difficult this would be of accomplishment in the present state of Canadian opinion.

Financial stress has brought with it the inevitable accusations of extravagance. Figures worked out by Mr. Moore for Manitoba show that in that Province increase in costs of secondary education has been much less in proportion than increase of enrolment, and that total expenditure on education was less in 1931 than it was ten years previously. The burden to-day, as the Dominion Bureau of Statistics has recently shown in a bulletin dealing with the Prairie Provinces, arises, not so much from excessive costs of maintenance, as from capital repayments on account of the great expansion of a few years ago. As the bulletin puts it, the previous generation spent more and paid less. The pace of expansion is likely to be much slower in the future with capital charges relatively smaller.

Unless world calamity destroys its great export trade there is no reason to think that Canada could not finance a reorganised system of Secondary Education for All, provided the system were worked with the selective emphasis that has been described above.

(II)

Distribution of Children of School Age and those attending School in Cities, Towns, Villages and Rural Parts (Census 1931)

The village and rural children at school represent only 90·9 per cent. of the ten-year group of 6–15 years of age.

The city and town school enrolment represents 107·2 per cent. of its ten-year group.

A large part of the discrepancy lies in the smaller enrolment in the rural high-school grades, particularly of boys. The villages should, on this account, be classified with the cities and towns rather than with the rural parts.

The percentage for the rural part alone is 89·8 per cent.

	NUMBER OF CHILDREN BETWEEN 6 AND 15 YEARS OF AGE INCLUSIVE			NUMBER OF CHILDREN ATTENDING SCHOOL		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Cities with population of 30,000 and over	547,049	274,133	272,916	589,147	299,388	289,759
Cities with population between 10,000 and 30,000	443,629	221,718	221,911	183,404	93,452	89,952
Towns with population between 1,000 and 10,000				289,312	144,679	144,633
Villages with population under 1,000	89,328	44,087	45,241	94,992	46,692	48,300
Rural parts	1,109,338	565,958	543,380	995,963	497,262	498,701
Grand Total	2,189,344	1,105,896	1,083,448	2,152,818	1,081,473	1,071,345
Total for cities and towns	990,678	495,851	494,827	1,061,863	537,519	524,344
Total for villages and rural parts	1,198,666	610,045	588,621	1,090,955	543,954	547,001

(III)

Growth of Enrolment in Elementary Grades, Secondary Grades and Universities

(Roman Catholic Schools and Universities in Quebec excepted)

Note.—The figures in brackets indicate percentage increases relative to the year 1901 as base.

YEAR	POPULATION 5–14 YEARS OF AGE	ENROLMENT IN ELEMENTARY GRADES	ENROLMENT IN SECONDARY AND TECHNICAL GRADES	POPULATION 15–24 YEARS OF AGE	ENROLMENT IN UNIVERSITIES AND COLLEGES
1901	849,238	764,944	48,215	780,307	7,039
	(100)	(100)	(100)	(100)	(100)
1906	—	814,548	55,774	—	9,678
		(106·2)	(115·5)		(137·5)
1911	1,071,564	949,638	67,217	1,057,663	13,372
	(126·5)	(124)	(139·1)	(135·3)	(190)
1916	—	1,134,498	82,505	—	12,953
		(148·5)	(171)		(184·1)
1921	1,462,910	1,342,313	105,935	1,131,029	21,293
	(172·7)	(175·9)	(219·2)	(145·1)	(303)
1926	—	1,411,206	173,071	—	24,770
		(184·9)	(358·4)		(352)
1931	1,632,803	1,481,967	233,962	1,464,773	33,014
	(192·8)	(194)	(485)	(188)	(469)

(IV)

Percentage Distribution of Children in Elementary and Secondary Grades

YEAR	PRE-PARATORY	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1926	2·0	18·2	11·8	10·0	10·8	11·4	9·7	7·7	7·7	4·6	3·1	2·5	·6
1931	2·1	16·4	11·7	9·3	11·3	10·8	9·3	7·9	7·8	5·3	3·9	3·1	·9

(V)

Acceleration and Retardation

The ten-year-old children of seven provinces (Quebec and British Columbia excluded) were divided into four equal groups according to grade and their progress followed for five years.

Mean Grade

AGE	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
10	2·10	3·52	4·18	5·26
15	5·97	7·89	8·96	10·39
Average fraction of a grade covered per annum for five years ending 1931	·77	·87	·96	1·03
Corresponding figures for five years ending 1925	·67	·83	·88	1·03

No increase of acceleration is seen in the last quarter, but there is a noticeable decrease of retardation in the first three quarters. This table takes account solely of progress through the grades. A pupil two or three years younger than the average of his class but progressing at the rate of only one grade per annum would not appear herein as "accelerated."

This table should therefore be read in conjunction with the following, which gives the grade distribution of ten-year-old and fifteen-year-old pupils in seven provinces in 1930–1.

Percentage of Pupils in Grade

AGE	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
10	4·9	12·6	19·5	33·5	23·8	5·2	0·5					
15	0·2	0·3	0·6	1·6	4·1	8·0	13·3	25·4	20·6	16·4	8·8	0·6

This gives strong evidence for a measure of "acceleration" in the sense of attendance in a grade for which the pupil is one, two or three years younger than is usual. It also shows that "retardation" is more pronounced than acceleration.

(VI)

Distribution of High-school Pupils according to Type of School

ALBERTA (1931)

TYPE OF SCHOOL	NUMBER OF SCHOOLS	APPROX. NUMBER OF HIGH-SCHOOL PUPILS
School with one teacher for all grades	—	2,772
School with two or three teachers for all grades	—	6,400
One-roomed high school	120	2,420
Two-roomed high school	38	1,520
Three-roomed high school	17	1,150
Four-roomed high school	11	10,000
Five-roomed high school	3	
Six-roomed high school	5	
High school with more than six rooms	14	

MANITOBA (1932)

TYPE OF SCHOOL	NUMBER OF HIGH-SCHOOL PUPILS
School giving part time of one teacher to high-school pupils	1,864
School giving full time of one teacher to high-school pupils	2,524
School giving full time of two teachers to high-school pupils	2,015
School giving full time of three teachers to high-school pupils	1,085
School giving full time of four or more teachers to high-school pupils	12,328

(of whom 9,371 are in Winnipeg and suburbs)

NOVA SCOTIA (1932)

TYPE OF SCHOOL	NUMBER OF SCHOOLS	NUMBER OF HIGH-SCHOOL PUPILS
School with one teacher for all grades	1,258	7,076
School with two or three teachers for all grades	250	
Larger schools		8,150

(VII)

Elimination of Pupils in High-school Grades

The school careers of the pupils who were eleven years of age in 1924 in Alberta and Nova Scotia have been followed to give the following tables:

ALBERTA

Number of eleven-year-old children in Alberta (1924)	14,502	*Percentage eliminated*	
Number appearing in Grade VIII	11,121	before Grade VIII	23·3
Number appearing in Grade IX	8,722	between Grades VIII and IX	21·6
Number appearing in Grade X	5,522	between Grades IX and X	36·7
Number appearing in Grade XI	4,249	between Grades X and XI	23·0
Number appearing in Grade XII or first year of university	2,056		

Note.—The lowest percentage of elimination occurs at the end of Grade VIII, where the break normally occurs in the present system. The percentage decrease at the end of Grade IX is almost twice as great and in absolute numbers one-third greater.

NOVA SCOTIA

Number of eleven-year-old children in Nova Scotia (1924)	11,153	*Percentage eliminated*	
Number appearing in Grade VIII	6,787	before Grade VIII	39·2
Number appearing in Grade IX	5,324	between Grades VIII and IX	21·6
Number appearing in Grade X	3,981	between Grades IX and X	25·2
Number appearing in Grade XI	2,353	between Grades X and XI	40·9
Number appearing in Grade XII or first year of university	1,066		

Note.—The pre-high-school elimination is greater in Novia Scotia. The percentage decrease between Grades IX and XI is approximately the same in the two provinces, but in Nova Scotia it occurs to a greater degree at the end of Grade X, when it is possible to gain admission to normal school.

(VIII)

Distribution of Full-time Students in the Faculties of Arts and Pure Science in certain Canadian Universities

Enrolment

UNIVERSITY	1ST YEAR 1927–28	2ND YEAR 1928–29	3RD YEAR 1929–30	4TH YEAR 1930–31
McGill	372	280	213	163
Western	239	194	153	140
Toronto	830	730	595	558
Manitoba	486	413	219	205
Saskatchewan	193	272	167	118
Alberta	97	119	91	139
British Columbia	601	312	225	317

The increasing proportion entering the university in the second year, particularly in the Prairie Provinces, is seen in the following figures:

Enrolment

UNIVERSITY	1ST YEAR 1929–30	2ND YEAR 1930–31
McGill	327	238
Western	275	201
Toronto	1,064	957
Manitoba	502	480
Saskatchewan	128	410
Alberta	82	173
British Columbia	555	502

CHAPTER EIGHTEEN

Present Tendencies in American Secondary Education

THE educational treatment of the adolescent period in American life presents a bewildering but altogether hopeful and instructive picture. At the present moment its status suggests comparison with the remaking of some great railway terminal. Schedules of traffic through the customary arteries are undisturbed, while above, beneath, and around them on all sides one discerns the rising foundations for a more ample, more economical, more purposeful, and a totally different procedure, directed towards the same ultimate purpose as before. The old will melt into the new by gradual, but by no means imperceptible, changes, although for some time to come the impression on a widely observant critic will be one of chaos.

It is hazardous to forecast any future educational arrangement too exactly. In interpreting forces of transition, one person regards as a " tendency " what to another appears negligible. The cautious prophet confines himself, therefore, to movements that exert indubitable pressure in certain broadly defined directions and admits at the outset that these may eventually express themselves in forms at present quite unforeseen.

The Ideal of Universal Secondary Education

The conditioning fact that governs the contrast between American and European secondary education is the relative bulk involved. In the United States the term " secondary " includes all adolescent educational activity of a formal, full-time nature. The country over, more than one-half of the population of suitable age (15–18) are actually in school. In important respects, however, the general effect on the school is much the same as if all were in attendance, for in many states the proportion is exceedingly high (65 to 80 per cent.) and many communities keep in school practically all their educable population of high-school age. It is the latter policy that fulfils the general ideal; schools everywhere strive towards this goal and adjust their practice to its demands. It is safe to say that in no European country does formal, full-time schooling at this period of life reach even one-fifth of its potential pupil strength, and nowhere in Europe can the education on equal terms of the entire youthful population be claimed as the immediate social intention from a national point of view.

Having thus done justice to the national ideal and to the relative *mass* of education that has resulted therefrom, one should at once specify its substantial quality—its relative *density* as a physicist might term it. Popular astronomy has familiarised us with enormous

masses that at the same time are exceedingly thin. When compared with the relatively smaller bulk but greater solidity of European secondary education, the analogy as applied to the American process is not unfair. Nor is it difficult to explain. Moreover, a true explanation of this " thinness " is indispensable to an appreciation of the changes now going on.

Consequences : The Time-serving Idea

The notion of making secondary education in a serious form universal represents an essentially new and a peculiarly dynamic element in world culture ; in America it has been favoured by the democratic social conditions of an extremely heterogeneous population, and has powerfully dominated all American educational practice. To put this striking social purpose into effect speedily and at a reasonable expense required, both in school and in college, a simple scheme of administration that should be as tangible as possible in its operation ; that is to say, the qualitative elements concerned with what a pupil actually *knows* and *is*—elements demanding expert, long-continued individual attention and careful judgments—must recede in favour of things that can be easily *done* and quickly checked.

Hence there has developed the time-serving idea, with short units of material that are flexible and tempting and that result in instalment " credits on account," transferable and non-forfeitable, to be accumulated at one's convenience. Education was to be assumed as a result of doing certain approved things rather than demonstrated directly as knowledge or power. Examinations covering more than a single term-course disappeared, and even term tests were largely discounted in favour of " class-work " day by day. Under such conditions standards could readily be adjusted to all types of mind ; " effort " was rated as achievement and mere conformity to requirements was likely to be mistaken for growth ; " socialisation " took the place of knowledge, and while good minds went far beyond the arbitrary requirements and supplied whatever justification for them there was, the least gifted could usually earn his " points." Naturally, both types lost respect for the process as anything but a game to be played with school and teacher, and tended to find their paramount values in extra-curricular " activities," where they were permitted free initiative. In the hands of the students many of these outside " activities " have proved to possess such extraordinary educative value that they have gradually been taken up into the curriculum for " credit," only to lose their compelling interest and attraction the moment they were dissected and mechanised like other studies.

The Massed Procession and the Teacher

Important to an understanding of the inner situation is the obvious fact that, when 75 instead of 10 per cent. of the adolescent

population are in school, the draft on available teaching ability moves from a select and thoroughly educated group at the top to an average stratum in which scholarship and thoughtful wisdom are much diluted. The teachers are themselves the product of the system described and inevitably account for much of its peculiar emphasis and perspective. They are the arbiters of promotion, but even their power is greatly limited, especially in city schools, by the fact that, except for a few conspicuous incapables, the massed procession must pass on. Teachers make their contacts with it at scattered points and for a moment only ; with the best of will they become agents of the system, helpless to achieve the true educational results that all this elaborate machinery would imply.

Reaction : The Introduction of College Examinations

A system of this artificial character is bound to collapse as soon as its numerical application approaches the maximum and it is discovered that its pretensions are all but invariably much exaggerated and often wholly mistaken. It is this discovery which is now taking place in the United States. Illumination has come from two principal sources to confirm the judgment that many felt but could not prove.

In 1911 the Harvard Medical School introduced a general, final examination for its degree, and during the decade after the war Harvard College instituted the same requirement in most of its departments. The change was notably successful and produced an immediate and startling tonic effect on the College and through it on the entire University. Following this model, many other institutions have introduced at the close of the curriculum the so-called comprehensive examination, which disregards what " course earnings " the student may have to his credit and probes his present knowledge to the bottom. Although this examination is variously interpreted and administered in the institutions that have adopted it, the idea is revolutionary and is working a profound change in the colleges which the secondary schools have ever before them for models and inspiration. It has thus familiarised the schools as well as the colleges with the notion that an education, far from being merely a collection of credit-coupons, should at least include demonstrable possession of a considerable store of thoroughly mastered knowledge.

New Tests in the Schools

Another significant development that has enforced the same impression in a quite different manner has been the rapid refinement of devices for objective educational measurement. As long as a competent teacher A.B. expressed what was merely his opinion of a good pupil's work in algebra by giving him a mark X, any incompetent teacher C.D. could duplicate the performance with any sort of pupil, and there the matter stood ; one teacher's mark was as good

as another's. An accumulation of such course-marks under the prevailing credit system entitled the holder to a high-school or college diploma, although the actual knowledge of one might be but a small fraction of that possessed by the other. Into this situation an objective measure introduces a stable and meaningful standard and scores become comparable wherever the test is given.

Examinations of this type should not be confused with so-called intelligence tests ; they have nothing to do with these controversial probes into " native " ability. They are merely skilful arrangements of the usual material of school and college subjects in such a manner as to secure (*a*) unequivocal responses to (*b*) an extensive sampling of the ideas involved when presented in (*c*) a form carefully scaled for difficulty. They are tests primarily of the knowledge and simple judgments that, in any field, must underlie the power to organise sequential reasoning in that field. Thus they tend to measure that power of *effective recall* of substantial and significant knowledge on which any fruitful thinking must depend and which the " memoriter " learner conspicuously lacks. While they do not define the precise uses that a student may be able to make of his knowledge, high scores indicating accurate and comprehensive mastery do appear to justify the inference that ideas thus held have achieved for their possessor a true education, since a large store of accurate ideas could hardly have been acquired except through practice in dealing with their logical relationships. While they by no means supersede other forms of examination that have been found useful in teaching, they are a trustworthy means for determining a student's capacity for participating with profit in instruction at any given level.

Tests of the sort above described depend for their effectiveness, as has been said, on three points : (1) unequivocal answers permitting objective, comparable scores, (2) suitable scaling of the questions for difficulty so as to outrange any pupil's ability and (3) comprehensive sampling of the important ideas over an extensive field. It is chiefly this last feature that has taken the props from under the American " credit " system. The subjective opinion of a single teacher on a pupil's reaction to ten questions chosen solely from what that teacher has thought fit to present within a narrow four-month credit-period, appears insignificant as an index of knowledge compared with that same pupil's performance on a 300-point test prepared by competent, independent scholars to cover the graded essentials of an entire field. In the latter examination the pupil moves at once outside any particular " course." and proceeds to register knowledge that he has retained and assimilated from other " courses," from personal experience, private reading, conversation, or travel—all obvious sources of education usually completely discounted in the single teacher's course-mark. It is this inclusive body of knowledge which constitutes the pupil's true equipment and which should be considered in estimating his ability or in planning his future.

An Experiment with the New Tests

The upset occasioned by the application of such measures is little short of catastrophic. During the past three years the Carnegie Foundation has had occasion to apply an extended examination of this sort to college undergraduates at the end of their second (or " sophomore ") year and to college seniors on the eve of receiving their degrees, as well as to selected pupils in the secondary schools. The test was prepared as a test of general college education by a group of able scholars in Columbia University. It consisted of about 1,200 items and surveyed in four hours of testing time the representative ideas characteristic of a liberal education in general science, in foreign literature, other than English, in fine arts, and in history and social studies. The test was identical and was given under the same conditions on all occasions.

Taken thus unawares, students who had traversed their courses and earned their " credits," with the customary intention of thereafter promptly dismissing their knowledge from their minds, fared badly. Of 3,300 seniors about to take their bachelor's degrees, about 1,000 made scores lower than the average scores of the sophomores two years below them, while of 4,900 sophomores over 1,100 secured scores above the average of the seniors.

At a sheer venture and without expectation of important results, the same test was given to 134 secondary pupils in the eleventh grade—a selected group of prospective college students for whom the Foundation was conducting an experiment with a modified curriculum. These young minds were the best out of a normal group of perhaps 800 public high school pupils and averaged 16·3 years of age ; they were, in terms of " credits," three and one-half and five and one-half years, respectively, behind the sophomores and seniors. Yet of the 134, no fewer than 48 outdid the average college sophomore, and 27 secured total scores better than those of the average college senior. The best of the group, a fifteen-year-old boy, known to possess unusual gifts, left behind him 99 per cent. of the sophomores and 93 per cent. of the seniors.

The most reasonable interpretation of these results leads to the conclusion, not that the secondary pupils were so remarkable, but that the averages for the colleges were inexcusably low. The " credit system," as now administered, readily admits and retains students whose actual intellectual powers are inferior, as well as many good minds without academic interests but able and willing to " get by " the requirements for the sake of social advantage. A still more serious, indeed, the fundamental, weakness of this piecemeal education by earning " points " is that, by reason of its incoherence, its lack of continuity, and its failure to place on the student any large constructive intellectual demands, it fatally ignores the stimulus that would arouse the superior minds to a substantial and worthy intellectual task. None of the colleges here tested had as yet adopted seriously the comprehensive examination referred to above.

The implications involved in the rapid introduction of devices so subversive of current procedure are numerous and far-reaching.

Possibilities of a New System of Measurement

Possessing comparable measures of abilities which, while not identical with education, are fundamental to it, and which run fairly parallel with powers that all admit to be the result of true education, we are in a position to do far greater justice to the individual than heretofore. We can appraise his mental equipment, not merely in subjects studied in school to the extent to which they have there been presented, but in all subjects and including his mental acquisitions from all sources. This is critically important when dealing with large numbers and with a migratory population—a combination which greatly reduces the possibility of adequate personal acquaintance with any given pupil.

Furthermore, we can now readily express these measures in a cumulative record which at a glance furnishes a true picture of the sequence of the traits they represent—their consistency, rise, or fall—over a period of years. Although still relative in character, the measures acquire an absolute value in proportion to the size and representative nature of the groups which furnished their original norms. They have the same definite meanings for school and college alike and, under our conditions of mass education, provide the first approximately sound basis for pupil diagnosis.

1. *Admission to College*

Such records are already being accepted experimentally by the most important colleges in the country, including those that have hitherto admitted only on final examination. This acceptance appears to foreshadow a revolutionary change in admission procedure. The pupil's main hurdle for this privilege at present is a single series of written tests, admirably administered by a central board, but consisting of a few, usually ten, questions in each subject, the answers to which are long and complicated and are variously rated by examiners of varying training, competence and point of view. The validity of the results in any given case must obviously be doubtful, especially when, as here, a fixed numerical line divides the passes from the failures.

The alternative procedure proposes a comprehensive cumulative record of the individual on which are entered, over the entire preparation period, the objective scores in his achievement tests year by year, in as many fields of knowledge as the school may be able to investigate. Full personal data supplement the ratings from point to point. Here the college finds the indubitable information that it needs to determine the ability of the individual to profit by its various offerings. Selection can be made one, two, or even three years before actual admission, and the present unnatural strain merely to "get into college" can thus be replaced for the pupil by

an effective co-ordination of his work with those later activities in college that will best continue and complete his whole educational experience.

2. *Educational Guidance*

Admission to higher institutions (or, indeed, to any activity requiring measurable preparation) in the manner just described is but the culmination, in the school, of a new procedure whereby the school's main function in education is rapidly being redrafted. The facilities for measurement and cumulative record form the foundation of these changes, but they penetrate every aspect of the school's intellectual life and compel its reorientation from a fresh point of view. This newly emerging emphasis, together with the collective changes for which it is responsible, may be summed up in the term *educational guidance*.

" Guidance " in the technical sense that is becoming familiar in the best American schools sprang from the vocational education movement, and it is still difficult for many to adjust their minds to the larger conception wherein the vocational aspect is only one co-ordinated feature. In order to give their young pupils profitable advice in vocational matters, the vocational counsellors seized at once on objective tests as the best sources for data to underlie and confirm their choices. From this it is only a step to such an objective and cumulative picture of any young mind as shall reveal its areas of most effective operations, its powers and limitations with a view to further education at any point.

Any school that catches this idea, and acts upon it, speedily realises that the current system of course-credits and fixed curricula is doomed. If there is no mastered knowledge behind the credits, as is now true of all pupils part of the time and of some of them most of the time, to that extent the system is false and useless for guidance. If there is genuine knowledge behind the credits, the system is unnecessary; it merely operates to enforce the impression that knowledge can be had only if and when credits are being earned. Comprehensive and objective tests of knowledge puncture the formal credit pretensions of some pupils and reveal that the genuine credit due to others is far too low. The tests may be taken at the end of the term and again after the summer's vacation, thus measuring definitely the *ad interim* gains from the pupil's voluntary work; they may be used as pre-tests at the beginning of a course to save from boredom and waste the few, but especially valuable, minds that are often discovered to be already competent in the work proposed.

Successful diagnosis of this description places the burden of education where it belongs—on the pupil or student—and acts as an immediate solvent of the old-fashioned rigid curriculum. Each mind is conceived as having a right to its own unique pattern of growth towards a goal that constantly redefines itself in more and more precise terms. To lay out arbitrary groups of fixed courses that must be chosen, traversed and credited by each pupil who

desires a diploma proves to be an artificial procedure that results in a factitious product ; a lasting effect can only be reached by arousing a mind into active use of that body of knowledge which is already peculiar to itself, and thereafter by stimulating it to seek enlarged and related horizons of its own making. In the latter case all subjects of study simply melt together into a convenient reservoir of knowledge to be appropriated on demand. Under the guidance of an experienced counsellor, each mind builds its own curriculum out of what it can retain and assimilate ; what it gets in formal school procedure may be only a small part of its total winnings, all or most of which, however, are reflected in the periodic general tests.

3. *The Curriculum*

What has just been said regarding the curriculum should not be thought to militate against the wisest possible arrangement of the material suited to the various levels of education. It is rather directed against the hardening of this material into something traditional, external and perfunctory that has everywhere taken place in the current patterns and that has assumed a false sacredness in disregard of the only true curriculum—namely, the sequences of ideas that do actually enter and abide in a pupil's mind. Selection of the ideas that can be given this access and can there be made effective, together with the best ways of presenting them, are the true problems in curriculum making, but they have little to do with the charted courses hitherto put together arbitrarily and imposed on a group of widely diverse mentalities.

The prime curriculum maker is the teacher or counsellor or whoever best understands the individual pupil concerned. He naturally must know his own field, as well as a good deal about many other fields, and should have available a profusion of suitable curriculum materials. But to bring the knowledge and the pupil into fruitful contact requires a personal insight for which no automatic transmission has been discovered. It involves contact far beyond the length of the term courses now familiar, it requires a steadily deepening knowledge of the pupil and of the various ways in which ideas come to him, and it demands complete freedom of action—freedom to assign and emphasise unusual activities, to ignore traditional procedure, and to take advantage of every favouring impulse in the pupil concerned.

The most emphatic movement giving expression to these tendencies is to be found in a group of some thirty important secondary schools that have recently secured the co-operation of the leading colleges for the acceptance, over an eight-year experimental period, of pupils prepared without the customary minute quantitative prescriptions. Schools having such ambitions have heretofore tended to wander in the clouds, unwilling to submit their product or processes either to academic or financial tests. These present experimenters, however, contemplate the most searching

of objective measurements and a critical analysis that should throw much light on practices that are now under scrutiny.

The breakdown of the artificial course-credit procedure and the introduction of provisions for adequate cumulative measurement throughout the entire schooling period will pave the way and furnish a powerful impulse towards that coherence and continuity which the American secondary curriculum has always conspicuously lacked. English and Continental schools, because of the integrating examinations given at the end of their work, have pursued various aspects of a subject either in rotation, or side by side, or with some attempt to effect intrinsic unification. This tendency is now emerging in American schools. Mathematics, traditionally parcelled out in rigid courses—elementary algebra, advanced algebra, plane geometry, solid geometry, trigonometry and calculus—is in many quarters undergoing changes that will weave its various intellectual techniques into a consistent whole. Natural science is submitting biology, physics and chemistry to the same interpenetrative process. Such treatment cannot fail to result both in a more substantial intellectual draft on the pupil and in giving him a far more significant equipment.

The social studies—history, economics, social and political problems—are in a state of continuous ferment due largely to the social upheaval consequent on the war, or stimulated by it. The tendency is to increase the time devoted to such work, to require it of all pupils, and to " modernise " the content with a view to shaping the pupil's attitude towards current social problems. Views differ widely as to what this chapter of the curriculum should contain, some enthusiasts insisting on mere propaganda of various sorts. The most rational procedure appears to be that which first emphasises exact knowledge of the facts and then provides great freedom for interaction of pupil and teacher in the discussion of their applications.

4. *Differentiation*

It is clear that the relative bulk of secondary education, to which reference was made earlier, must necessarily condition the curriculum in American public schools in a manner not likely to be met with elsewhere. And the effect is heightened by the prevalent tendency to concentrate adolescent education in great comprehensive organisations—" cosmopolitan " high schools with thousands of pupils where every known type of school offering is presented, in contrast with the small one or two curriculum schools familiar in other countries. In the presence of this extraordinary wealth of human material containing, in quantity, every distinguishable type of mind and motive, one feels the weight of the parallel obligation to differentiate suitable activities for each age and capacity-level and for each interest. It is at this point that the American school to-day must admit its most deplorable shortcoming.

If algebra wins no response in a pupil who honestly works at it,

what experience shall be substituted that is both stimulating and profitable? Under the moribund curriculum of points and credits, an effective answer to this question was usually wrecked on the difficulty of making the proposed substitute a "standard" course of equal "value." Under a plan of tested guidance, however, such an objection has no meaning. The purpose is to educate the child, not to satisfy the curriculum; any material that will serve best in that direction is legitimate, and it is legitimate only to the extent to which it serves that purpose. Of this the teacher himself, if he knows the pupil, is clearly the best judge; if not, it is a thorough understanding of the pupil that must first be sought.

It is thus the fine adjustment of the educational process as a learning rather than a teaching process that constitutes the main problem of the American secondary school to-day. The general intellectual ability of the pupil fixes early the level and quality of his performance. The ideal object of the school is to keep all curriculum requirements subordinated and flexible so as to give the pupil the utmost possible range in those matters where his tested and effective interests provide a maximum of support.

The Establishment of Junior Colleges

Readjustment and further differentiation in a larger sense is making notable progress in that aspect of American secondary education hitherto identified with the American college. It has long been realised that the present institutional division between high school and college is accidental rather than functional. The cleavage everywhere visible in other countries between true secondary or general education and that provided by the universities has been obscured in America by attachment, for other than intellectual reasons, to an organisation that holds together and seeks to unite the culminating features of one sort of training with the introductory experiences of the other. In early days when attendance was limited largely to that type of individual who in any case would proceed to higher education, the difficulties of this combination were not so acutely realised. Under present conditions, the attendance at many four-year institutions is reduced by fifty per cent. before the beginning of the third year, and it is obvious that a large part of this defection is among those students who either lack ability or who seek in their education a general orientation in the phenomena of the world about them and have little relish for labours of a strictly intellectual character.

So widely has this development been recognised that a new type of institution, a two-year college, has arisen, first in the western and central portion of the country, but more recently dotting the educational landscape from coast to coast. There are at present nearly five hundred such units. Whether attached to a local high school, or representing an earlier four-year institution unable to solve its financial problems, or whether independently established for the

purpose, these " junior colleges " came into being as avowed first stages in the traditional organisation, and the possibility of proceeding without loss of time to the advanced courses at full-sized institutions was an almost invariable feature among their published " advantages."

To a great extent this idea that the junior college is an incipient four-year higher institution is prevalent to-day, but is far weaker than formerly and a different conception is fast gaining ground. As this separate lower unit has taken shape the old college and university organisation has become increasingly aware of the alien elements that these early years have necessarily injected into the more purely intellectual and professional activities that they desired to promote. Long-discussed and partially attempted reorganisation at Johns Hopkins University in Baltimore and at Leland Stanford University in Palo Alto, California, was followed by a radical rearrangement at the University of Chicago whereby this and many other reforms were introduced almost at a stroke. At the latter institution the first two years have been integrated with the foregoing secondary period ; and the university proper, to which admission is afforded only after an elaborate examination, now begins with what was formerly the third, or junior, year.

Future Lines of Development

Without attempting to rehearse the evidence, much of which is intangible and implicit, rather than expressed, it may confidently be said that the existing tendencies point strongly in the direction of a new type of secondary institution comparable in some few respects with the institutions giving university preparatory education abroad but having a far more inclusive and more varied scope.

Undoubtedly the already accepted principle of concentration, characteristic of the American high school, will prevail here, and we shall have a true community institute for general secondary education covering the entire adolescent period through to the university, which will then assume a form much more nearly that of its European prototype. Preparation for the university will, of course, be given at this institute, but the latter's function will not be conceived as that of a preparatory institution for higher education. It will be instead the agent of the community for the systematic education and distribution of all its human forces. It will be catholic in its admissions and in its offerings ; its procedure will follow the general principles of the " tested guidance " already described, and its aims will be to reconcile for all members of the community the maximum expression of individual resources with the studied needs and opportunities both of a local and national society.

Within its limited sphere, the existing American high school serves this purpose to-day. By rounding off and completing its function through the incorporation of the two secondary years now spent in college, its reach and influence will be vastly increased.

To it can then be assigned also the conduct and promotion of adult education through all the community resources that may be at hand. Music, art and drama will come much more fully into their own when given the steady, intelligent and well-equipped support that an organisation of this scope and character will render possible.

Conclusion

Surveying the situation as a whole, it is evident from what has been said that in certain specific features the American educational scene is approaching that with which the European observer is more familiar. The universities are considering how they may shake off their elementary and preparatory work and devote themselves whole-heartedly to their professional tasks. In methods of organising material, the secondary schools are feeling their way to a vertical integration of subject-matter that has long obtained in other countries. Both secondary and higher education are gradually adopting what has always appeared to the European to be the only natural and conclusive principle for appraising an educational outcome—namely, a thorough and comprehensive examination of the individual.

On the other hand, the forms that American solutions for these various problems are likely to take are strikingly dissimilar when compared with their European counterparts. The provision for a suitable education for each individual through adolescence is a hope very dear to the American heart and one for which he will make great sacrifices. To define this " suitability " in accurate and trustworthy terms is the problem on which he is now most intent. As an aid to this, the entire method and procedure of appraising intellectual powers and products is undergoing radical revision and will probably assume forms of which the European critic may at first be entirely sceptical. On the whole, there never was a time more favourable to an impartial and critical review of the educational theories and practices that the past thirty years have produced. Secondary education in America is taking full advantage of this wholesome situation to re-study its traditional aims and to devise better means for attaining them.

W. S. Learned.

Creative Education

CHAPTER ONE

The Re-planning of the Schools

THE studies published in this YEAR BOOK since its first appearance have brought out clearly at least one fact: the extent to which, in all countries, educational systems are being reconsidered and deliberately re-planned. But behind all this reconsideration and re-planning there seems to lurk, even in Soviet Russia, one half-conscious assumption. It is assumed that social conditions in the highly developed countries of the British Empire, Europe and America will, broadly speaking, remain the same in the future as in the past.

The Static View of Western Civilisation

This may seem a strange assertion in face of such an apparently fundamental re-planning of social life as is taking place in Russia, but it is surely the truth. In all civilised countries, the reformer desires, no doubt, to see a redistribution of wealth and political power among the citizens, but he assumes that the world can continue to rely on its existing sources of wealth, that those sources will continue to yield an increasing return to human science and human labour, and that science and labour will continue to be applied to them on much the same lines as in the past, though with better organisation and greater efficiency. In other words, mass production by specialised labour will continue in the future as in the past, only more so. Moreover, the political power which is to be redistributed is to be a power exercised mainly to ensure the most efficient possible exploitation of natural resources. The Soviet political system and the Five-Year Plan are in glaring contrast with nineteenth-century practice; but, if one looks deeper, they merely perpetuate and intensify the nineteenth-century habit of measuring political systems by economic standards.

In the light of these anticipations, education is regarded as the handmaid of a sort of efficiency-seeking democracy. At least, its devotees still call it democracy; but even in countries which, unlike Russia, Italy and now Germany, retain the old political forms, the word is losing its old connotation of individual freedom of choice and movement. The citizen is to be trained to perform specialised labour, and this specialised training must inevitably limit his choice of the means of earning his livelihood; on the other hand, his

trained efficiency will tend to increase his leisure, and he is to be offered the general culture necessary to enable him to employ that leisure. In the organisation of industry he will tend increasingly to be little more than a cog ; on the other hand, as a political voter, he will be increasingly concerned with the general regulation of the industrial system, and he is to be offered the political enlightenment necessary to enable him to discharge that function.

The Dynamic View of Colonial Education

But, while the highly developed countries of the western world look at their own education in this way, they are increasingly coming to apply a very different set of standards to the education of the " subject " or " backward " races for whom they are responsible. They at first confined themselves, rather blindly, to training an official and professional class, selected from the masses by western methods of education. In 1833, Sir Stamford Raffles at Singapore put his trust in the " single individual of rank raised into importance and energy " who might " abundantly repay our labour by the establishment of a better order of society in his neighbourhood by the example he may set and by the resources of the country he may develop." Three-quarters of a century later, Paul Doumer, in Indo-China, was still aiming at training " auxiliaries of French civilisation." The result has been a " lop-sided extension of education " owing to " the emergence of an articulate minority of Europeanised natives from the inarticulate mass," from whom they are separated by an almost unbridgeable gulf.[1] Now, for some time past, the western nations have been realising their mistake and have changed their policy. They have, in fact, rediscovered, in dealing with such races, the ancient truth that the business of popular education is neither formal training nor political enlightenment, but direct social reconstruction. That is to say, its business is reconstruction from the school district upwards by change of social habits, not from a national legislature downwards by use of the vote. They have begun to apply this discovery in every part of the world —in Punjab villages, in the Black Belt of Alabama, in " Jeanes " schools in East Africa, and in " mass education " experiments in China. This new approach to the problem of what may be called colonial education is the most interesting and hopeful educational development in the modern world, but the contrast between this dynamic treatment of education in overseas dependencies and a static treatment of it in the home countries suggests certain obvious doubts, and there are signs that these doubts are already beginning to influence thoughtful minds.

The Revolution in Western Civilisation

For, in face of the unemployment problem of the whole civilised world, is it any longer possible to assume that industrial

[1] See *Problems of Imperial Trusteeship* ; *Native Education* ; by the Hon. H. A. Wyndham. Oxford University Press.

civilisation is going to progress uninterruptedly along its old lines of development? Is it not evident that our highly organised world is changing about us as rapidly as the world of more primitive societies; and is it not evident, too, that the very perfection of our old organisation makes the change infinitely more dangerous? Over-specialisation of labour, which has increasingly tended to stifle the social independence of the citizens of western countries, is now depriving them even of the means of livelihood. Is it really an exaggeration to say that the industrial habits of South Wales or Tyneside are to-day as disastrously out-of-date as the agricultural methods and the marriage customs of the Bantu tribesman or the Indian peasant? Confronted by such changes, shall we not have fundamentally to reconsider the whole structure of our school system and the whole content of our teaching, if we are to restore to our education that creative power which is its true function? At least it may be worth while to examine the real nature of the principles which at present determine our educational policy.

The Sieve and the Irrigation Canal

The truth seems to be that our educational policy is governed by two different principles, both of which are lumped together under the vague title "democracy," but which are really in subtle conflict: the principle of social equality and the principle of equality of opportunity. It is easy to conceive a world in which these two principles would mean exactly the same thing educationally, but they do not mean the same thing in the actual world of to-day. For historical reasons, on which we need not enlarge, "opportunity" has been construed to mean, in practice, access to certain professions, and the approach to these professions lies through the secondary school and across the hurdles of successive examinations. These examinations are designed to act as a sieve for ability, and under their influence the problem of efficient sifting tends to dominate educational policy. "Social equality," on the other hand, means rather equal access to knowledge, in order that each citizen may have the more modest, but much more dynamic, opportunity of self-development. Its symbol is not the sieve, but the irrigation canal, distributing men's abilities through a thousand fertilising channels. The tragedy of modern democratic education is that the sieve has become the symbol, not only of the secondary school, but, through it, of the whole "common school" system—the *école unique* or *Einheitsschule* of continental controversy—which should, one would have thought, have been conceived as the canal. In creating that system the nations have slipped insensibly into the error of restricting its curriculum, at any given age, to those departments of knowledge of which all entrants can be expected to make some use at that age, and which will therefore most efficiently perform the function of an equalising sieve. In other words, to vary the metaphor, instead of equipping a comprehensive library to which all will have equal

access, we begin to bowdlerise the contents of our library so that no one who enters it will feel really uncomfortable whatever shelf he takes a book from.[1]

Languages and the Common School

This bowdlerisation of the content of education reveals itself in England in the " free place " examination and in the whole system of cramming the primary-school pupil in English and arithmetic for that examination. But, perhaps, its tendencies can be best understood by studying one relatively minor instance of its working, the tendency of the " common school " to drive children into private schools.

It was a universally assumed principle among the " cultured " classes in the days of classical education that their children should begin the study of Latin as early as the age of 9 or 10. This assumption persists to-day in the case of modern languages, though in the teeth of much contrary advice from experts. But such an early approach to a foreign language presupposes at least that the child has already attained that sort of command of its mother tongue which comes from living in a " cultured " home and from more personal teaching than can be secured in the school classroom. Such a command is the essential preliminary to any systematic study of a foreign language. This essential requirement is not, or, at any rate, has not in the past been, fulfilled by the great majority of common-school pupils, whose home circumstances have generally tended to stunt their language faculty. Foreign languages cannot, therefore, be introduced as a regular feature of the curriculum of the common primary school.

The Common School and the Secondary School

There are only three possible alternative ways of reconciling these two conflicting demands. One is to stop your common primary school not later than the age of 10. That has been the policy of Germany ; but it may be doubted whether it is anything more than an ineffective compromise. Indeed, Germany has admitted this by allowing the abler children to leave the *Grundschule* at the age of 9 in order to pass into the preparatory classes of the *Gymnasium*. The second alternative is to exclude secondary education to a large extent from your common-school system altogether. That is the policy of France, where, in State secondary schools, the age groups 6–7 to 10–11 comprise no less than about 35 per cent. of the whole student body. The third alternative is to drive all children whose parents wish them to begin their language education at an earlier age into private schools. That seems to be the policy of Denmark, where the five age groups already mentioned in private schools comprise about 15 per cent. of the whole student body in all types of secondary

[1] Compare Prof. Clarke's study of the effects of the grade system in Canada in the preceding section.

school—State and private. England has, probably rightly, rejected the first alternative by adopting a break at 11. She has experimented hesitatingly with the second alternative, but the five age groups already mentioned only comprise about 9 per cent. of the student body in English grant-aided secondary schools. For the most part she has adopted the third alternative of driving children into private schools.

"Democratic" Secondary Education and the Private School

This process of driving children into private schools has been going on almost unnoticed for many years, and few people have, perhaps, realised what is happening. Obviously, if a child enters upon an important new course of study between the ages of 9 and 10, a break at 11 is inappropriate to him. The age at which he should be transferred to a full secondary school is rather between 12½ and 13½, i.e. the "public" school entrance age. As the older endowed schools have become grant-aided schools, and as the number of free places in them has been steadily increased, it has become increasingly difficult to combine a student body coming from the elementary school at the age of 11 with another student body coming from a preparatory "language" school at a later age. The conflict was interestingly exemplified in one "public" school, Dulwich, which for a short time after the war was forced to seek a grant from the Board of Education, with the accompanying condition of the award of a certain percentage of free places to ex-elementary-school pupils at the age of 11. The difficulty of handling this double entry of students at different ages was largely instrumental in deciding the school to abandon State aid. In other schools which have become increasingly dependent on State aid, the same conflict has resulted in driving out a large proportion of the middle-class fee-paying student body which, in old days, formed their main clientèle.

The Preparatory Department

Until recently, a compromise was made possible, especially in girls' schools, by the existence of preparatory departments taking fee-paying children at the age of 9 years or even younger. Some years ago, however, the Board of Education adopted the policy of requiring that the fees charged by these departments should meet their whole cost, since the Board feared that otherwise these departments might offend against the clause in the Education Act which prohibits a State grant being made to a fee-paying "elementary" school. The preparatory departments survived this policy, but more recently they have had to face another requirement which threatens to cut at their very root. The Board's regulations have always provided that all children admitted to the secondary school proper must be admitted by means of the same examination, but

this requirement was for long very loosely interpreted. There are now signs that it is being strictly enforced, with one inevitable result. The common " free place " examination, which serves as the admission examination to secondary schools, is an examination taken at about the age of 11 in English and arithmetic only, and the candidate for a secondary school tends to be more or less intensively " crammed " in those subjects at the elementary school. We know—and knew long before Prof. Valentine pointed it out to us so forcibly—that this examination is a thoroughly unreliable test of fitness or unfitness for a secondary education. This unreliability is inherent in any attempt to test a candidate's fitness for one course of study by examining him in his attainments in a quite different course of study. The pupil in the preparatory department of a secondary school, on the other hand, has had a broader curriculum, yet the very fact that this curriculum is designed to prepare him for a full course of secondary education puts him at a disadvantage in the examination which serves as an entrance test to that course. The strict enforcement of this examination requirement is, therefore, likely to drive a new body of children from the preparatory departments of grant-aided schools into new private schools.

The Private School Problem

It is a matter for regret that the Departmental Committee appointed by the Board of Education to enquire into private schools failed entirely to appreciate the connection we have tried to indicate between the growth of private schools and the increasing adoption by the State of a " democratic " common-school policy.

The Report of the Departmental Committee

This Committee reported in 1932 that there were approximately 10,000 private schools, containing 400,000 pupils. Only 1,300 of these schools had been inspected by the Board of Education, and only 2,500 had been placed open to inspection by the local education authorities. Of the former, only 600 were under periodical inspection, and of the latter only 1,000 had been inspected at all, very few having been reinspected. The Committee reported, further, that many of these schools were excellent, and the majority of them " above serious reproach " ; but that " a small proportion are so gravely defective that they are harmful to the mental and physical welfare of their pupils," and " a larger proportion are seriously weak and inefficient."

Having found these facts, however, the Committee contented itself with recommending a purely suppressionary policy. All private schools were to be required to register with the local education authority by furnishing it with an annual return. All such schools were to be subject to inspection. A statutory minimum requirement as to the education to be given in them was to be laid

down, prescribing " efficient instruction in reading, writing and arithmetic of a scope and standard suited to the children's age and capacity," and minimum requirements as to premises were to be prescribed by the Board of Education in statutory regulations. Inspection was to be carried out by the local education authorities or by the Board of Education, and " if, in the opinion of the inspecting authority, a school did not comply with the minimum requirements, after six months' formal notice to the proprietor, it should be the duty of the inspecting authority to apply to a Court of Summary Jurisdiction for an order for the closure of the school " ; or, alternatively, for an order enforcing any directions given by the inspecting authority for the purpose of preventing over-crowding or regulating the admission of pupils.

The Demand for a Different Primary Course

It is obvious that such recommendations suffer from the common weakness of all purely repressionary policies. They rest on the assumption that, where a parent and a school proprietor enter into a contract which enables the proprietor to exploit the parent and the child, it is sufficient to suppress the exploiting party to the contract without examining the motives which have led the other party to place himself in a position to be exploited. A bad school is not merely evidence of the existence of unscrupulous pseudo-teachers ; it is evidence also of the existence of a demand among parents for alternative opportunities of education for their children, and, if exploitation is to be prevented, the most effective means of doing so is to satisfy the parents' demand in better ways. It is too much the fashion to dismiss this kind of demand as a symptom of mere snobbishness. Snobbishness is, of course, one of the feeders of the private school, but, as a matter of fact, it would be easy to argue that parents have, in the past, often been in advance of public administrators. A good many private schools grew up in order to meet the demand of middle-class parents for something better than a purely elementary education between the ages of 12 and 14. This demand was often unenlightened, but it was fundamentally right, and public administrators have now recognised its rightness by making a comprehensive effort to provide definite courses of post-primary education for all children over the age of 11. Similarly, the demand of middle-class parents for something better than a purely common school education for some, at least, of their children above the age of 9 may well be one which the public administrator of the future will have to meet.

Lowering the Standard of Secondary Education

This tendency to an excessive " democratic " uniformity in primary education would not, of course, matter much if it produced no ill-effect on secondary and higher education. But it is now

coming increasingly to be recognised that our whole system of secondary and higher education tends to be stunted by the abruptness of the break between the primary and secondary school. As we have made every possible effort to stock our secondary schools with pupils who have had no opportunity to show their tastes or their abilities in languages and science, and have, indeed, entered the school at an age when they can hardly be expected to give any reliable proof of such tastes or abilities, it is inevitable that these schools should tend to be dragged down by the dead weight of their junior forms. And this downdrag is all the stronger, because in many, and indeed in most schools, it is not counterbalanced by the existence of a strong sixth form to which the middle forms can look up. The demand now being made on the " democratic " secondary school is, in fact, that it should give, not a truly secondary education of that traditional type outlined by Mr. Percival Smith in the preceding section, but an intermediate or middle school education to pupils who do not intend to continue their education beyond the age of 16, and whose main reason, indeed, for entering a secondary school at all is to obtain a leaving certificate at that age, which will enable them to " get on in the world." Yet this demand for " getting on " is just the one which the secondary school fails to satisfy, or satisfies only to a very limited extent. It is, of course, very difficult to estimate what changes in social texture are being effected by education. Probably the best approximate measure, though a very rough one, is a comparison of the occupation in which a child's parent earns his livelihood with the occupation entered by the child after leaving school. The University of Liverpool has recently conducted a survey of secondary education in Merseyside,[1] with interesting results.

The Merseyside Survey

The authors of this survey classified occupations into : (1) professional and administrative posts, (2) teachers, (3) responsible commercial posts, (4) clerks, (5) agents and shop assistants, (6) skilled manual workers, (7) semi-skilled manual workers, (8) unskilled manual workers. It was estimated that, in Merseyside as a whole, 45 per cent. of the parents of secondary school children belonged to classes 1–3, 22 per cent. to classes 4–5, and 33 per cent. to classes 6–8. Of the children of the first class, 42 per cent. entered occupations of the same class, 42 per cent. occupations of classes 4–5, and 16 per cent. occupations of classes 6–8. Of the children of the second class, 61 per cent. entered occupations of the same class as their parents, while 25 per cent. entered occupations of classes 1–3, and 14 per cent. occupations of classes 6–8. Of the children of the third class, only 20 per cent. entered occupations of the same class as their parents, 57 per cent. entering occupations of classes 4–5, and 23 per cent. occupations of classes 1–3. The net result appears

[1] *Social Factors in Secondary Education.* University of Liverpool, 1932.

to have been that, while, as already stated, 45 per cent. of the parents belonged to occupations of classes 1–3, 22 per cent. to occupations of classes 4–5, and 33 per cent. to classes 6–8, only 32 per cent. of all children in secondary schools entered occupations of classes 1–3, and only 17 per cent. occupations of classes 6–8, while 51 per cent. entered occupations of classes 4–5. The upshot of these figures, and of others included in this survey, seems to be that, though the grant-aided secondary school effects some reshuffling of social classes, its net result tends, under present economic conditions, to be to increase from generation to generation the number of persons engaged in minor clerical occupations and in subaltern positions in the retail trade.

The "Finishing School"

One should, of course, hesitate to draw positive conclusions from a survey which depended to some extent on the taking of samples, but it is difficult to resist the conclusion that the general character of our secondary education is too much that of a "finishing school"; in fact, for the boy or girl who leaves at 16, as nearly 80 per cent. of all children on Merseyside appear to do, the secondary school is, perhaps, even more completely a finishing school than the elementary school. It is true that a steadily increasing number of ex-secondary school boys do enter technical schools, but until very recently the technical schools made no considered provision for the ex-secondary school boy. As was pointed out in the chapters on "Education for Industrial Vocations" in the YEAR BOOK for 1933, England possesses no course of middle grade or higher technical education, part-time or full-time, to which a secondary education up to 16 is the recognised mode of access. The result is that the aim of the secondary school tends often to be more narrowly vocational than that of much of our junior technical education. If the secondary student is being prepared for any concrete prospect, he is being prepared for a school-leaving certificate and for the sort of job to which such a certificate will admit him. In other words, the very type of school which is ignorantly worshipped in the name of "equality of opportunity" and under the symbol of the sieve, is failing to discharge that function. Culturally it is still, probably, the best school in the world, in spite of misuse, but culture without power of action is as dead as faith without works.

The Intermediate School

There is, in short, a certain rigidity in the secondary-school system, a certain formalism and narrowness of aim. In a time of change the social reformer is naturally inclined to turn to more malleable institutions. The focus of educational policy is therefore tending to shift from the secondary to what may be called the intermediate school. As one example of this, it may be interesting to glance at the record of the Intermediate Schools of Sheffield.

The Sheffield "Intermediate" System

In addition to the ordinary public elementary and secondary schools in Sheffield there are now five so-called Intermediate Departments. Only in a single particular is there any essential difference between these intermediate departments and the secondary schools: the pupils attending the former are under no obligation whatever to remain at school after they have attained the statutory leaving age. As a matter of fact, however, a large number of "intermediate" pupils do stay on until they have reached the age of 15 *plus* or 16 *plus*. All the intermediate departments lay themselves out to provide a four-year course, and at two of them from 30 to 35 per cent. of the number entering each year actually stay on to complete it. Fourth-year pupils are presented "en bloc" for the the school certificate examination of the Northern Universities. Pupils who matriculate may, if they so desire, be transferred to secondary schools or to the Pupil Teacher Centre in order to prepare for the higher school certificate.

The premises occupied by intermediate departments are of the ordinary elementary school type. Only one of them is a new school, and in general their premises are only moderately convenient. None of the head teachers, and few (if any) of the assistants have had any secondary-school teaching experience, but there is a good leavening of graduates (chiefly of Sheffield University) on the staffs. The annual entry at each department is about 120 (three forms of 40), and at the beginning of the educational year there are as a rule about 120 in the second year, 80 in the third year, and 45 in the fourth and subsequent years. Each has about eleven or twelve forms organised as nine or ten classes or teaching units. Subject-specialisation is the rule, and there are usually three or four teachers on the staff in excess of the number of classes. The staffs are paid at elementary rates, and the salary cost per unit of average attendance is very low, considering the type of work that is being done. In one, the cost in 1931–2 was no more than £10 7*s*. 5*d*., exclusive of the salaries of the handicraft and domestic science instructors.

In this same department, the first to be established, all the pupils staying on till the fourth year have, since 1928, been presented for the school certificate examination, and the percentage of passes has never been less than 81 per cent., as against 70·2 per cent. for the country as a whole in 1932. These have not been selected pupils: they were simply those (about 12½ per cent. of the total enrolment) whose parents have been able to afford to keep them at school until they completed the four-year course. In addition, optional examinations have been regularly taken—for example, in 1931: Oral French, 16 presented, 15 credits; Practical Chemistry, 20 presented, 15 credits; Practical Physics, 20 presented, 14 credits. The successes which the intermediate departments have achieved in the school certificate examinations naturally suggest comparisons

between them and the secondary schools of the city. The following figures give point to this comparison :

PERCENTAGE OF PASSES IN SCHOOL CERTIFICATE EXAMINATION

SCHOOL	1928	1929	1930	1931	1932
Secondary Schools:					
A. Girls	72·0	78·7	69·5	63·5	57·0
B. Girls	70·1	79·5	68·4	55·2	74·2
C. Boys	78·0	75·5	77·0	76·2	79·2
D. Boys	60·8	67·3	63·6	58·1	57·6
E. Boys	—	—	70·2	69·9	69·3
Intermediate Schools :					
A. (All mixed)	83·3	51·4	84·0	75·0	71·4
B. (All mixed)	82·9	91·1	81·6	86·1	85·7
C. (All mixed)	—	34·6	100·0	77·8	100·0
D. (All mixed)	—	—	66·7	71·4	58·3
Country as a whole	69·2	67·5	68·6	68·9	70·2

It seems pretty clear that these results are not due to "cramming" or to the use of methods which are open to objection from the educational point of view. The schemes of work for the first three years are of a purely general nature, and it is not until the fourth year that the syllabus is at all affected by the requirements of the school certificate examination.

The East Suffolk Area Schools

But this type of selective intermediate school is only one, and by no means the most significant, among a diversity of types which are being developed as the result of the policy of the "break at 11." It is to these various new types that the educational reformer of to-day is mainly looking for a new dynamic or creative force in our school education. In order to bring out this fact, it may be interesting to glance at another type at the opposite end, as it were, of the scale, the new Area Schools of East Suffolk,[1] where the school-leaving age was raised to 15 in 1925.

At the end of 1932 twelve such schools had been established and fully equipped, and six more had been established but not yet completely organised. The full scheme prepared by the County Council provides for a total of 56 schools. They are non-selective senior schools drawing their pupils from an area within a radius of about 4½ miles. The bias of the curriculum of these schools is indicated by the fact that, in the second year, of the weekly total of

[1] See *An Experiment in Rural Reorganisation*, 1933. Board of Education Pamphlet, No. 93. Stationery Office, 9*d*.

24 hours 10 minutes, 4¼ hours are allotted to manual training for boys and domestic science for girls, 3½ hours to gardening, practical and theoretical, for boys and gardening and needlework for girls, and 2¼ hours to art and handwork and 2 hours to science for both boys and girls. Usually the school has a site of from five to six acres which is developed as a kind of garden estate. Each school has two " special subjects " rooms, one for handicraft and the other for domestic science, of 1,000 square feet, and the tendency is to equip the workshop " much more in conformity with realistic practice in traditional crafts than ever before," including simple machinery.

There is, of course, nothing new in this attempt to combine horticulture, workshop training and elementary science into an educational instrument for building up " a well-trained and enterprising rural community "—as may be seen from Mr. Hefford's chapter in the YEAR BOOK for 1933 (pages 209–24). This East Suffolk experiment represents, however, almost the first deliberate attempt to organise the senior education of a whole county on this basis. Moreover, such experiments in the past have tended to be blurred by a certain atmosphere of amateurishness, the same sort of air of remoteness from actual conditions as has characterised the " arts and crafts " movement in relation to the operations of modern industry. The significance of such experiments to-day is that they synchronise with a new realisation of the possible place of small holdings, and even of subsistence agriculture, in the national economy of the future.

A New System of Secondary and Intermediate Education

The senior or intermediate schools of various types thus represent a real attempt to use education as an instrument of social reconstruction, and it is on this foundation that we have to build a system of vocational education devoted to the same purpose. The problem of education for industrial vocations was discussed at length in the YEAR BOOK for 1933, and we need not return to it here, though we shall study a particular example of it in Chapter Five of this section; but it is impossible to emphasise too strongly the fact that all vocational education depends for its success on the existence of a sound system of secondary and intermediate education. It is for that reason that, in the preceding section of the present volume, we have endeavoured to make a detailed survey of the work of secondary schools in Great Britain, and also in Canada and the United States.

An ideal system would probably provide for a wide variety of intermediate schools with four- and five-year courses, beginning at 11 *plus*, but for a substantial uniformity of curriculum during the first two or three years. Thereafter, there would be a diversification in respect of certain subjects, according as the pupil leant towards the commercial, art, technical or " academic " sides, but the main body of the work would still be common. At the end of the fourth or fifth year, definite specialisation would be called for and the

students would be drafted accordingly to technical, commercial or art schools, if they are entering industry, or to the senior courses of the secondary school, if they are taking up pure science, the arts, or some such professional study as law or medicine. This would amount, in a sense, to an extension of the " common school " up to 15, but the aim of this common school would be diversity, not uniformity—and a natural diversity, untroubled by visions of any mechanical selective sieve. The common curriculum of the first half of the senior course would facilitate transfer from one school to another. The pre-certificate course of the secondary school would be absorbed into this general common-school system, becoming an intermediate course of the same kind as other intermediate courses ; while the two- or three-year post-certificate course would also be paralleled by some, though probably not many, whole-time courses at commercial, technical and art colleges. The scheme would thus approximate to the Austrian system described on pages 877-80 of this volume ; it would also present the same general problem of " test-guidance " as is now occupying the attention of the American high school (see Dr. Learned's chapter, pages 607–18). The superstitious value which now tends to be attached to a " secondary " education up to 16 would fade away. Above all, such a system would get rid at one blow of the whole unsatisfactory business of " sieve " selection at the age of 11 through a " free place " examination. On the other hand, the secondary school proper would be freed for its real task of post-certificate or pre-university education.

The Freeing of the Secondary School

This scheme is realistic and it is creative. Such a school system would possess the variety and flexibility necessary to the task of social reconstruction ; it would not be strait-jacketed by such traditional forms as now tend to be imposed on the average run of secondary-school pupils who aim no higher than the school certificate. But would it give scope to a true secondary education ? Secondary, as distinct from intermediate, education has a part to play in the work of social reconstruction—perhaps the most important part of all. It can play that part only if it is more wisely selective than it has been in the past, and the postponement of the task of selection until the school certificate age will tend to substitute selection by preparation and " test-guidance " for selection by the examination sieve. But can it safely postpone selection to quite so late an age ? The experience of the Scandinavian countries perhaps throw some doubt on the efficiency of the intermediate course as a selective agency, and the experience of Scotland seems to tend in the same direction. Theoretically, the teacher should be able to detect the future scholar in the mass of intermediate school pupils and give him special attention ; but in practice the inevitable limits to the grading of pupils in a highly organised school system, to which we have referred on pages 274–77 of this volume, render difficult any but the broadest classification.

Moreover, can we afford to sacrifice that inestimable quality of our secondary schools, their power of imparting to their students, from an early age, a school spirit and a sense of incorporation into the life of a school society ?

If there is anything in the line of argument followed in the first part of this chapter, it may be suggested that an experiment at least should be made in the direction of lengthening, instead of shortening, secondary school life by developing the preparatory departments of grant-aided schools into an alternative course of education for selected children. This course would fork away from the primary school at the age of 9 or 10, but would merge again into the senior school after the age of 11. In effect, this would mean that secondary schools, primarily devoted to giving post-certificate or pre-university education to children over the age of 15 or 16, would tend to maintain, as an integral part of itself, a lower school providing a five- or six-year preparatory and intermediate course for selected children.

Such a scheme would, of course, not exclude entry into the intermediate department of this lower school from the primary school at the age of 11, still less entry into the post-certificate course from another type of intermediate school at the age of 15 or 16. It would merely provide an additional opportunity for earlier admission to some children.

Can a School System be Re-planned ?

But, if we are to get rid of the " sieve," selection for entry into the lower school of a secondary school will have to be left to that school itself, and there is little doubt that such informal selection will tend to favour children whose home circumstances have been specially favourable. This is not, it may be urged, a real objection. These favourable home circumstances may be due to social injustices perpetrated by our forefathers, but they represent, in terms of social dynamics, a positive asset in education which the country cannot afford to waste, and to neglect such an asset is to reject what is good in our inheritance in order that we may the more wholeheartedly grumble at what is bad in it. Nor is this the only, nor the more serious, way in which we tend to waste the national asset of favourable home circumstances. Such favourable home circumstances are based upon a higher standard of living which almost inevitably, in practice, means a costlier standard. Ever since the Reports of the Royal Commission on the Universities of Oxford and Cambridge at the end of the war, we have applied a means test to university scholarships, irrespective of the standard of life of the home from which the scholar comes. Now the Board of Education is applying similar means tests to free places in the secondary school, and the eventual result of this policy will probably be to base secondary school fees in the future on a sliding scale in relation to the parents' income (see pages xvi and xvii of the YEAR BOOK for 1933). " The result to-day " (to quote a chapter from the YEAR BOOK for 1932, page 188) " is that, while in many areas it

is fortunately easy for the able child of the clerk or artisan to achieve a university career, in a large proportion of cases it is much more difficult for the equally able child of the parson, the doctor, the lawyer, the teacher, the civil servant or the business man."

Education Outside the School

But this line of argument is not likely to be accepted by " democrats," who will continue to demand the application of a uniform sieve to all comers. The truth is that there is an inevitable rigidity about any common-school system based, as it must inevitably tend to be, not merely on the principle of social equality expressed in the right of equal access, but on an attempt to enforce an ideal of equal opportunities for social advancement based on social uniformity. One is, in fact, driven to the conclusion that, though it may be possible, and is of vital importance, to devise a school system which shall not be out of harmony with a reconstructed society, such a system will never in itself be sufficient agency of social reconstruction. For such an agency we must to some extent look outside the walls of the school itself. The phenomenon of extra-curriculum " activities " which constitute a more living educational force than the curriculum itself is not confined to the American high school (see page 608); it is the constantly recurring characteristic of all organised education. What pioneer elementary schools can do in an Indian or an African village cannot be directly done in an English village by schools which are cogs in a democratic machine designed to one pattern by public authorities or university examiners. For the dynamics of education, we must, it would seem, look even outside the new intermediate school system which we are devising, however successful that system may be in permitting a freer development of individual tastes and abilities. Outside the school, indeed, there are three great educational forces which are too often ignored. There are, first, recreational and cultural activities conducted, to some extent, in connection with the schools, but outside them ; such, for instance, as the Scout movement. There is, next, that chaotic, yet hopeful, field of educational experiment among juveniles who have left school, the field in which both evening institutes and voluntary organisations carry on their work, which we have sought to cover since the war by the Juvenile Organisations Committees, and where to-day, under pressure of the unemployment problem, a new kind of State education is growing up in the Junior Instruction Centres of the Ministry of Labour. There is, lastly, the great field of adult education which has been developed in so remarkable a way during the past twenty years. These are the fields which we shall endeavour to survey in the following chapters. We shall first take the Scouts as the typical example of the first field, that of extra-school activities for the school boy or girl, though the work of the Scout movement, of course, extends far beyond that field.

E. P.

CHAPTER TWO

The Boy Scout Movement

Origins

THE idea of training boys in Scouting dates from 1884, when I applied it to recruits in my regiment, and in revised form, from 1897, to young soldiers in the 5th Dragoon Guards. I had found that it was necessary to develop a man's character before putting upon him the routine training of drill. The system was based on education as opposed to instruction and was an evolution of the ideas of Epictetus, the code of the Knights, the Zulus and Red Indians, Dr. Jahn, Sir William Smith, Dr. Arnold, Thompson Seton, my own father and others. The possibility of giving responsibility to boys and training them seriously was brought to the proof on a small scale during the siege of Mafeking, when, with the help of Lord Edward Cecil, I raised a corps of boys. The success of the experiment was so great that the idea of further development, on an extended scale, was forced on my attention.

When I came home from South Africa in 1902, I found my book, *Aids to Scouting*, being used for training boys by various Boys' Organisations. As the book had been written for soldiers some years previously, it was not really suitable for boys, although the suggestions contained in it were capable of adaptation to their needs. An experimental camp for boys, under my own direction, was held in 1907, and, as the result of the experience thus gained, the book was used as a basis for a more complete exposition of my ideas in regard to Scouting, written with the development of boys' character as its main object and published as *Scouting for Boys* in 1908. At that time there was no intention of having a separate organisation of Boy Scouts. Rather was it thought that the officers of the Boys' Brigade, the Junior Y.M.C.A., the Church Lads' Brigade, and other similar organisations, as well as schoolmasters and ministers of religion, might find something in the book that would help them in their work with boys between the ages of 11 and 18. However, a large number of boys and men outside these organisations and vocations began to make use of the ideas and it was found necessary to form some kind of directorate to control it. The movement soon assumed such proportions that in 1912 an application was made to the Privy Council for a Royal Charter of Incorporation. This was granted. His Majesty the King became Patron and H.R.H. The Prince of Wales became Chief Scout for Wales.

Growth of the Movement

The growth of the movement both at home and abroad has exceeded all anticipations and its story is a record of constant

expansion. The figures for the last five years, so far as they concern the British Empire, are as follows :

	ENGLAND	SCOTLAND	WALES	IRELAND, ULSTER	IRELAND, FREE STATE	TOTAL BRITISH ISLES	OVERSEA	BRITISH GROUPS IN FOREIGN COUNTRIES	GRAND TOTAL
1928	303,194	46,786	12,644	6,098	1,534	370,256	281,677	2,197	654,130
1929	326,818	48,948	13,858	6,338	1,686	397,648	290,977	1,961	690,586
1930	360,726	53,195	16,078	6,028	2,071	438,098	315,340	3,445	756,883
1931	376,684	56,331	15,882	6,213	2,367	457,477	347,492	3,338	808,307
1932	392,768	59,488	16,395	6,427	2,345	477,423	372,558	3,225	853,206

Outside the British Empire, according to the latest returns available, there are 1,306,778 Scouts, representing forty-four nations recognised by the International Bureau.

As the movement grew it became evident that it would have to be expanded in various directions to meet the needs of those who were left outside it. At the present time there are the following departments :

1. WOLF CUBS. Age 8–11.
2. BOY SCOUTS. Age 11 and upwards.
3. ROVER SCOUTS. Age 17 and upwards.
4. SEA SCOUTS. For boys living near facilities for sailing and boating, on the sea coasts or inland waters.
5. DEEP SEA SCOUTS. For boys and men who have made sea-faring their life work.
6. SPECIAL TESTS SECTION, which deals with cripples, deaf and dumb, blind, and others who, from their special disabilities, are unable to enjoy the full measure of Scouting.

The Association publishes a paper, *The Scouter*, for the benefit of its adult members, and *The Scout* for its boy members, maintains cordial relations with kindred societies, encourages drama by acting and recommending plays, encourages music by the holding of an annual musical and folk-dancing festival, arranges for the migration of Scouts and their after-care in the Dominions and, by means of International Conferences and Jamborees, seeks to promote international friendship. It maintains a hostel, Roland House, in Stepney, London, E.1, and a convalescent home, Rosemary Home, at Herne Bay. It has also established a Friendly Society which enjoys the advantage of a membership consisting of young fellows leading a clean, healthy life.

The Association possesses at Gilwell Park, Essex, an estate which is a training centre, not merely for British Scout workers, but also for others from all over the world. District and county centres for training also exist in other parts of the British Isles and overseas.

The greatest need of the movement is a sufficient number of men of the right type to act as leaders. It is hoped that the universities, theological, training and technical colleges and other institutions will be able to render valuable help in this direction. Already there are thirty-nine Rover Crews or Scout Clubs at this class of institution, and the number slowly but steadily increases from year to year. Other obvious recruiting grounds are the public and secondary schools. Sixty per cent. of the schools which are members of the Headmasters' Conference and nearly 200 secondary schools in the British Isles have adopted Scouting as an additional school activity, and Scout Clubs are also run in connection with great businesses, such as the Bank of England, other banks, railway and insurance companies.

Organisation

The organisation and government of all these various departments of activity is a heavy task for a body that receives no public funds, and does not even ask its constituent groups for any kind of affiliation fee. The leadership of the movement, locally and nationally, is practically entirely in the hands of voluntary workers and, in order to stimulate enterprise and give plenty of opportunity to local initiative, the keynote of the organisation is decentralisation.

Under the Royal Charter, the Association is governed by a Council not exceeding seventy members, with the Chief Scout as chairman, and an Executive Committee of eighteen, consisting mainly of the heads of the various departments.

In each county there is a County Scout Council with a County President, County Commissioner, etc. The county is divided into districts each of which is in charge of a District Commissioner acting with a Local Association, composed of adult helpers, Scout and Lay. The unit for Scout organisation in the district is the Group, which consists generally of the three sections, Cub Pack, Scout Troop and Rover Scout Crew, and is normally under a Group Scoutmaster. Finally each section is under its own adult leader, who governs it with the help of the Patrol Leaders in Scout Troops, and of Rover Mates in Rover Scout Crews.

Those who are interested in the details of the powers, etc., of these various sub-divisions should consult *Policy, Organisation and Rules* (*6d.*), published by the Association and revised from time to time.

Cubs

The training of the junior section of the movement is carried out in " Wolf Cub Packs " under a Cubmaster, with one or more Assistant Cubmasters. The number of boys in a Pack is restricted as far as possible to twenty-four. A Pack is divided into " Sixes," with one of the boys as a " Sixer," but this sub-division is merely a matter of convenience for the playing of games. The Sixer, being quite young, has no responsibility for the training of the members of his Six in their Cub Tests, but is given certain disciplinary duties as

steps to responsibility. The Pack as a whole is the unit for work and play, and every endeavour is made to engender a happy, family atmosphere in which the boy learns the first lessons of self-discipline and is imbued with the team spirit.

Women are eligible for appointment as Cubmasters and Assistant Cubmasters, and have been attracted in large numbers to this junior section of Scouting—commonly called Cubbing. At the same time, emphasis is laid on training towards manliness and on the need for preparing Cubs to meet the knocks that will come to them in the future. The Cub Law is a simple matter of obedience and self-control—" The Cub gives in to the Old Wolf ; the Cub does not give in to himself "—the Old Wolf being anyone in authority over him. The Cub Promise is a slightly simplified form of the Scout Promise.

The immediate object of Cub training is to prepare the small boy to be a Scout, and for this purpose he is expected to pass certain simple tests which include, in the first stage : knowledge of the Union Flag ; ability to tie and use four simple knots ; certain physical and agility exercises, such as turning a somersault, leap-frog, hopping, ball catching and throwing, skipping and balancing ; knowledge of elementary hygiene as regards hands, feet, nose, nails and teeth ; and ability to tell the time.

A further stage in the training requires the following tests to be passed, voluntarily as before : the alphabet in Morse or semaphore ; the eight points of the compass ; two verses of " God Save the King " ; saving " sixpence by his own efforts " ; making model, etc. ; household tasks, such as cleaning boots, lighting fire, carrying messages and tidiness ; other physical exercises, such as toe-touching, knee-bending and walking the plank (not in the pirate sense of the term) ; and very elementary First Aid, such as cut finger, scald or burn and dirt in scratch.

When he has passed these tests a Cub is then able to go in for certain badges, which are grouped as follows : *Character*—Collector, Observer, Gardener ; *Handicraft*—Artist, Homecraft, Toymaker ; *Service*—First Aider, Guide, House Orderly ; *Physical Health*—Athlete, Swimmer, Team Player.

All these Tests and Badges, together with the general practice of Cubbing, provide a comprehensive system of supplementary education which is being used in whole or in part in large numbers of preparatory and elementary schools, and in 8,500 Packs throughout Great Britain.

The training is effected mostly through games and imaginative practices. The imagery of *The Jungle Books* has been used as the basis of the scheme of training outlined in *The Wolf Cub's Handbook*, which I issued in 1916 as a result of the experience gained in actual practice over the previous few years. But, at the same time, due weight is paid to the desire of small boys of this age to feel that they are advancing farther up the ladder, and in consequence the " play way " idea is not carried to excess.

Scouts

Though Scouting is a game, it is a game with a purpose; like any good educational system, it concerns itself with the moral, intellectual and physical development of its members. On the moral side it is based on the Scout Promise and on the Scout Law, which teach the virtues of honour, loyalty, happiness, friendship, courtesy, kindness to animals, obedience, cheerfulness, thrift and purity. No boy can be enrolled as a Scout until he has promised on his honour to do his best to do his duty to God and the King, to help other people at all times, and to obey the Scout Law.

Scouts are divided into different classes or ranks—Tenderfoot, Second Class, First Class and King's Scout. A boy passes from one rank to the other, at his own rate, that is, as he becomes more and more proficient. There are no seniority promotions. The tests for promotion are graded in quality and quantity. They are easy enough in the lower grades to offer no discouragement to the weak and feeble; they are difficult enough in the higher ranks to call for considerable industry, patience and skill.

First Class Scout Tests

Thus, to become a First Class Scout a boy must have attained the age of 14 years, and must pass the following tests:

(1) *Swimming.*—Swim 50 yards. If a doctor certifies that bathing is dangerous to the boy's health, he must, instead of this, pass for one of the following badges: Camper, Handyman, Healthyman, Naturalist, Pioneer, Stalker, Starman or Tracker.

(2) *Thrift.*—Understand the meaning of thrift and be practising it, and must have saved and paid into a savings bank account a sum consistent with his opportunities of saving (minimum one shilling).

(3) *Signalling.*—Send and receive a message either in semaphore at rate four (twenty letters a minute), or in Morse at rate three (fifteen letters a minute). He must also understand the use of the calling up sign VE and its answer K; the general answer, the end of the message sign AR and its answer R; the alphabetical check for numerals and the erase sign.

(4) *Estimation.*—Estimate distance, numbers, height and weight, without apparatus, within 25 per cent. error.

(5) *First Aid.*—Know the position of the main arteries (names not necessary) and be able to stop bleeding; how to apply first aid to fractures; and the proper method of dealing with any of the following emergencies: fire, drowning, runaway carriage, fainting, ice breaking, electric shock.

(6) *Cooking.*—Cook satisfactorily (over a wood fire in the open) two out of the following dishes, porridge, bacon or hunters' stew, as may be directed; or skin and cook a rabbit; or pluck and cook a bird; also make a "damper" or a "twist" baked on a thick stick.

(7) *Mapping.*—Read and be able to use a one-inch Ordnance Survey Map (or its local equivalent), and draw an intelligible rough

sketch map. Use a compass and point out a compass direction by day or night without the help of a compass.

(8) *Axemanship.*—Use an axe for felling or trimming light timber, or, if this is impossible, produce an article of carpentry, or joinery, or metal work, made by himself satisfactorily, or make a working model of any kind of machinery in metal or wood.

(9) *Recruit.*—Train a recruit in the Tenderfoot Test. (This may be postponed if recruits are not immediately desired, but must be carried out within three months of its being required, or the badge given up).

(10) *Journey.*—Go on foot, or row a boat, alone or with another Scout, to a point seven miles away and return again, or ride an animal or bicycle (not motor) a distance of fifteen miles and back; he must write a short report of the journey, with special attention to any points to which he may be directed by the Examiner or his Scoutmaster (a route map of the journey is not required). The journey should occupy about twenty-four hours, and camping kit for the night must be taken and used, though in abnormal circumstances the Local Association may give permission for the test to be made easier to meet exceptional cases. This test should normally be the final one taken for the First Class Badge.

Proficiency Badges

When a boy has attained the rank of Second Class Scout he may try to earn one or more Proficiency Badges. Of these there are over seventy. They may be classified roughly as follows: (*a*) Public Service, e.g. ambulance, fireman, missioner, sick-nurse; (*b*) Hobbies, e.g. gardener, musician, photographer; (*c*) Occupations, e.g. bee-farmer, carpenter, engineer, mason; (*d*) Sports and Pastimes, e.g. swimmer, boatman, cyclist, master-at-arms.

The number of badges for proficiency is purposely large and varied so that any boy can find at least one or two that will appeal to him. In this way, abilities of all kinds are developed and the foundations laid for sound activities and interests for leisure time in the future.

An important point about the examination for the award of a badge is that the test in each case is not so much the standard of excellence arrived at as the amount of effort put into his work by the boy. In this way the dull and backward boy has equal opportunity with the more brilliant and can thus be freed from the shackles of the " inferiority complex."

On the physical side there are games, camping, hiking and such exercises as bridge-building, hut-building and tree-felling.

The Patrol System

Each Troop of Scouts is made up of Patrols of from six to eight. The Patrol Leader is usually appointed by the Scoutmaster, after consultation with the Court of Honour, but chooses his own

assistant or Second. The Patrol Leader is given full responsibility and has opportunities of developing powers of organisation and leadership.

In connection with the Patrol system is the Weekly Court of Honour. The meeting is sometimes presided over by the Scoutmaster ; the other members of the Court are the Patrol Leaders and, in some cases, the Seconds, but in the older established Troops the Court sits under the leadership of a Patrol Leader. The Court interviews offenders and slackers, deals with the Troop finance, manages its business and plans its enterprises. The Patrol Leaders present reports of the work done by their Patrols during the previous week ; the boy Secretary keeps the minutes ; the boy Quartermaster attends to the supplies. All this constitutes a valuable training in business habits and an introduction to civic life.

From this condensed account it will, perhaps, be gathered that the idea is to produce the type of manliness which is best exhibited in the frontiersmen of our oversea Dominions—men distinguished for their energy, resourcefulness, pluck and endurance. The game is one in which muscles, brains and morals all have a part, and it is because of the intimate connection between them that the moral element is able to exert so great an influence for good. The duties of an Arthurian Knight and the adventures of a Robinson Crusoe are interwoven in such a way that the spirit and rules of the game touch every possible aspect of a boy's life. Scouting is not merely an aid to education ; in more than one sense it is an education in itself.

Sea Scouts

I might be permitted a passing reference to the Sea Scouts, since it is on the inland waters of my own country that I first learned my scouting. Sea Scout Groups are not confined to our sea coasts, but are encouraged inland on rivers, canals, lakes and lochs. In a maritime nation such as Great Britain, the term Sea Scout is not incongruous, even if used by a Group in the centre of England, and the usefulness of this additional incentive, especially amongst older Scouts, has proved itself abundantly. Sea Scouts are just Boy Scouts who are expected to acquire all the knowledge of Scouting that land Scouts possess, and have the privilege of indulging in water activities over and above all the other Scouting activities.

Rovers

I then come to the senior—but most recently formed—section of Scouting. For various reasons, into which I need not go here, it was deemed expedient to provide a continuation of Scout training for those who had passed the Boy Scout stage and had attained the age of 17. It was the desire of many of these young fellows that they should still be retained as Scouts. To keep them in Troops would have entailed a diminution of the training in responsibility given gradually to the younger boys. After much experiment,

therefore, it was decided to establish Crews of Rover Scouts in which the older boys could be associated and through which they could be given added strength to carry out their Scout training and Scout ideals in their ordinary lives.

My book, *Rovering to Success*, with its talks on Horses, Wine, Women and Humbugs, was published in 1922 in order to provide the Rover Scout—and other young fellows for that matter—with information as to the pitfalls he might find in his life and the ways in which he might circumvent them. At the same time it suggests a scheme of continued training in Scouting and the open-air life which might prove beneficial to him.

Before anyone can become a Rover Scout he is required to have studied *Scouting for Boys* and *Rovering to Success*, the Scout Promise and the Scout Law, and to have sufficient knowledge of practical Scouting to be able to train a boy in the Tenderfoot Tests. The standard of admission is purposely kept low so that those who need help most should not be debarred from the advantages which Rover Scouting may be able to give them. In his subsequent training no definite tests are required of the Rover Scout, but he is asked to carry it out along some such lines as the following, helped by the other members of his Crew and by his Rover Scout Leader, who must be a man of sufficient age and experience :

Ideals : develop the spiritual side of his life as required by the first part of the Scout Promise ; be guided in his life by the principles of the Scout Law ; establish himself in life so that he is not dependent on others ; carry out the Scout duty of helpfulness to other people into some form of service to the community.

Practical : appreciate, and as far as possible acquire a working knowledge of, the principles, aims and methods of Scouting in all its main sections—Cubbing, Scouting and Rover Scouting ; have a practical knowledge of camp and open-air life ; adopt generally, as part of his outdoor activities, hikes and rambles with a purpose ; practise care of his own health in matters of cleanliness, fresh air, exercise, food, clothing, physical health, with special emphasis on moral cleanliness ; cultivate the habit of employing usefully his spare time ; have a knowledge of the government of his country and district.

This again is a very comprehensive programme which depends at this stage mostly on the individual. It does, however, in our experience, help to further development in various qualities or abilities which should be possessed by men of to-day, such as unselfishness, an understanding of citizenship and a proper use of leisure.

The counterpart of the Rover Scouts on the high seas are the Deep Sea Scouts, who are Scouting's most recent development and who have already proved their worth. Men and boys serving in the Navy, the mercantile marine or the fishing fleet can enrol as Deep Sea Scouts, adopt or continue the practice of Scouting, and link up with Scouts in any ports in which they land. There is a

very great future for Deep Sea Scouts in the imperial and international side of our work, as a definite link between Scouting in different countries. Their use as Scout Ambassadors was not foreseen, but has proved none the less effective.

International Scouting

It would be out of place here to go into details, but the fact is to be noted that nearly all the civilised countries in the world have taken up Scouting, in many cases as directly ancillary to their educational system. There exists therefore a World Bureau, controlled by an International Committee, under the direction of an International Commissioner. It issues a quarterly journal entitled *The Jamboree*, and arranges every fourth year an international camp where Scouts of all nations come together in an atmosphere of healthy brotherhood. In 1933 such a camp or " Jamboree " was held in Hungary, where some 50,000 boys were present from thirty-five different nations. In addition to this, interchange of visits between Groups of different countries has become a widespread practice. From the United Kingdom the average number of Scouts visiting their Brother Scouts almost each year has been about 8,000. Thus a wider outlook and more extended goodwill are being developed in the coming generation.

" A Great Demonstration in Practical Education "

The claim of the movement to be regarded as a definite educational agency is based on :

(1) The way in which schools all over the world have added Scouting to their other activities. There are Groups in 86 public schools, in 112 of the preparatory schools belonging to the Preparatory Schools Association, in 194 secondary schools, and in 219 elementary and private schools. The total number of school Groups in the British Isles is thus 611.

(2) The character of the training itself, with its insistence on handicrafts and other forms of educational activity.

(3) The fact that many of the leading educational authorities have seen in the movement the application of certain principles which may be of value at some not too distant time in a reformed system of education. Fourteen years ago, Sir Percy Nunn praised the movement in his book, *Education, its Data and First Principles*. He stressed the fact that in a world of make-believe the Boy Scout received moral lessons of a strong and abiding character, and at the same time learned many things " often more valuable than anything he acquired from his teachers at school." Sir George Newman, in his report on *The Health of the School Child* (1928), called the movement " the greatest demonstration in practical education that the world has seen."

(4) The fact that the international work of the movement, especially amongst the young, has become of considerable importance

and has enabled many boys of school and other Troops to camp and hike abroad and to mix on the best of good terms with their fellows of other nations. The value of this work was recognised in 1923 by the Fifth Committee of the League of Nations when it referred to the Boy Scouts and Girl Guides as " a movement which, by the constant exchange of visits, by camp life, by games played and by happy days spent together, during which the young people get to understand one another, increases from day to day their feelings of comprehension, respect and love for their neighbours, whatever may be their language, race or continent." It is significant that in his recent book, *The Relevance of Christianity*, Canon F. R. Barry wrote : " To see the Scouts Hostel at Kandersteg and watch boys of every nation and language working together to conquer a mountain peak, is to realise that the new generation is moulding a new moral ideal."

In view of such considered pronouncements no apology is needed for including an account of the Boy Scouts in such a book as this ; no review of modern education would be complete without some reference to a movement which has been rendering exceedingly valuable service to the community for a quarter of a century.

BADEN-POWELL.

CHAPTER THREE

Education Outside the Schools

THE description of the Boy Scouts in the last chapter should properly be supplemented by a description of the Girl Guides organisation, but for this space is not available in the present volume. These two movements are, perhaps, the most remarkable examples of a wide range of organisations which aim at enlisting the interest of boys and girls during their school life and at carrying the elementary school boy or girl forward after he or she leaves school. If the improvement and re-planning of the school system, which we discussed in the first chapter of this section, partakes somewhat of the nature of trench warfare, this field of educational work among juveniles between the ages of 14 and 18 is a moving battle, confused, tentative and often blundering, but enjoying, at least, freedom of movement and offering great possibilities. This field, moreover, reaches forward into the other connected field of adult education. Let us see roughly what is happening in the whole of this field.

Education between the Ages of 14 and 18

The Local Education Authorities

At the centre of this moving battle, and becoming more and more the focus of it, are the institutions provided or assisted by the local education authorities: the technical and non-technical evening classes of the evening institutes, polytechnics and technical schools and colleges of various kinds, with a still slight but significant stiffening of part-time day education in day continuation schools. These institutions were fully described in the Year Book for 1932 and the description cannot be repeated here. Their significance has been lightly touched on in our discussion of education in relation to the economic crisis in Part I, Section I, Chapter One, of this volume. Round this central block of institutions range a number of voluntary organisations, mainly recreational in character, but with distinct educational aims.

Voluntary Boys' Organisations

For boys, the most important of these activities are represented by four main associations, in addition to the Boy Scouts: the National Association of Boys' Clubs, the Boys' Brigade, the Church Lads' Brigade and the junior departments of the Young Men's Christian Association. The corresponding associations for girls, in addition to the Girl Guides, are focused in the National Council of Girls' Clubs, to which are affiliated five national societies: the Federation of Working Girls' Clubs, the Girls' Friendly Society,

the Girls' Life Brigade, the Girls' Guildry and the Young Women's Christian Association. The strength and age range of these various associations are roughly as follows.

There are 851 boys' clubs, with 96,800 members, affiliated to the National Association of Boys' Clubs, 14 per cent. of the members being under 14 and 9 per cent. over 18. Twenty per cent. of the clubs are in London, 6 per cent. in Scotland, 16 per cent. in Lancashire, the remainder being widely distributed throughout the British Isles, Birmingham having 65 clubs and Wolverhampton 41. These clubs to some extent overlap with the Boys' and Church Lads' Brigades, but probably not to any very great extent. They include, however, as many as 217 Y.M.C.A. Clubs and Y.M.C.A. Scout Troops. In addition, there are a number of clubs not affiliated to the National Association.

The Boys' Brigade has a membership of 100,000 of ages 12 to 17, in addition to the preparatory organisation of " Life Boys " of ages 9 to 12, which has a membership of about 50,000.

The Church Lads' Brigade has a membership of 67,000, with a junior section for ages between 10 and 14 and a senior section for ages between 14 and 21. The total number of working units in the British Isles is 1,033 in England, 7 in Scotland, 60 in Wales and 46 in Northern Ireland.

The 217 units of the junior departments of the Y.M.C.A. already mentioned deal with approximately 30,000 boys, included in the total of 96,800 for Boys' Clubs.

Of the total of 392,768 members of the Scout movement in England, approximately 210,000 are probably scouts between the ages of 11 and 17 or 18.

Voluntary Girls' Organisations

The membership of the National Council of Girls' Clubs, apart from Girl Guides, is approximately 310,000. Eight hundred clubs, with about 37,000 members, are affiliated to the Council through local unions. Nearly 30 per cent. of these clubs are in the London area, and another 30 per cent. in Lancashire and Cheshire. About 7 per cent. are in Scotland and 9 per cent. in Birmingham, the remainder being centred in Southampton, Oxford, Bristol, Norwich, Cambridge, Leicester, Nottingham, Stoke-on-Trent and South Wales. The remaining clubs are affiliated through the five national societies: the Federation of Working Girls' Clubs, 170 clubs, 15,000 members; Girls' Friendly Society, 2,290 clubs, 158,200 members; Girls' Life Brigade, 1,060 companies, 42,200 members (some in overseas countries of the British Empire and in China and Latvia); Girls' Guildry, 408 companies, 23,700 members; Y.W.C.A., 150 clubs, 33,300 members.

No information is available as to the ages of the members of the 800 clubs not attached to these five national societies, nor is any information as to age available in the case of the Federation of Working Girls' Clubs; but five-sevenths of the members of the

Girls' Life Brigade, one-third of the members of the Girls' Friendly Society and seven-tenths of the members of the Girls' Guildry are under 14, and 14 per cent. of the members of the Y.W.C.A. are under 13. Moreover, half the members of the Girls' Friendly Society and 7 per cent. of the members of the Girls' Guildry are over 18; two-thirds of the members of the Y.W.C.A. are over 16 and only one-sixth between the ages of 13 and 16. The average age of the girls' club member is probably substantially higher than that of boys' club, and it is doubtful whether, of the total of 310,000, more than one-sixth are between the critical ages of 14 and 18.

The total membership of the Girl Guides in Great Britain and Ireland is 614,686, of which 294,408 are Guides. It is, however, impossible to say exactly how many of these are between the critical ages of 14 and 18.

Educational Work of Voluntary Organisations

It is difficult and would not be very informative to generalise about the educational work done by these organisations. It is safe to say that the main emphasis of that work in the boys' organisations is physical training in various forms. A number of both boys' and girls' organisations have been founded with a definitely religious motive, and Bible classes and the like play a considerable part in their work; but, in addition to this, there is a very wide range of classes both in handicrafts and "cultural" subjects.

The Juvenile Organisations Committees

During the war an attempt was made to focus more definitely the work of these various organisations in each locality. A central Juvenile Organisations Committee was appointed by the Home Secretary in 1916 and was transferred to the Board of Education in 1918. Its present Chairman is the Duchess of Atholl. There are 79 local Juvenile Organisations Committees now in operation in England, and the work of these committees has recently been fully discussed in a pamphlet published by the Board of Education.

It would be impossible to assert, and the Board of Education are, in fact, far from asserting, that this attempt to mobilise the whole range of voluntary effort in each locality into one concerted movement has been very successful up to now. The tendency of voluntary enterprise is naturally fissiparous. Even strong national associations like the Boy Scouts have been successful largely because they have, on principle, allowed the widest freedom of action to their local associations, and it is obviously more difficult to secure anything but the loosest co-operation between different national associations, each with its own slightly different emphasis. But this difficulty, though to some extent inherent in the whole character of voluntary enterprise, is greatly enhanced by the lack of volunteers who have the capacity or the taste for purely administrative work. It is becoming, perhaps, more and more evident

that the natural method of co-operation between private and public enterprise in education, as in other directions, lies in the provision by public authorities of the administrative staff necessary for efficient volunteer field work. Probably the most effective of the local Juvenile Organisations Committees are those where the local Juvenile Employment Officer acts as administrative secretary. This brings us to a final and most important central force in the moving battle of juvenile education, which is pushing forward steadily into a commanding position—the so-called junior instruction centres and classes of the Ministry of Labour.

The Junior Instruction Centres

These centres began soon after the war as a makeshift method for dealing with what was regarded as a purely temporary state of juvenile unemployment. They were then generally known as juvenile unemployment centres. They began to assume increasing importance and a rather more permanent character in the " depressed " areas after the coal stoppage of 1926. They have now, as we shall see, assumed a much more permanent character as part of the recognised machinery for meeting the educational needs of juveniles between the ages of 14 and 18.

The following table shows the number of juveniles in attendance at courses of instruction approved by the Ministry of Labour in March 1933 :

JUVENILES IN ATTENDANCE AT APPROVED COURSES OF INSTRUCTION

DIVISION	AVERAGE DAILY ATTENDANCE: WEEK ENDED MARCH 22ND, 1933: JUNIOR INSTRUCTION CENTRES AND CLASSES: CLAIMANTS: BOYS	CLAIMANTS: GIRLS	NON-CLAIMANTS: BOYS	NON-CLAIMANTS: GIRLS	TOTAL: BOYS	TOTAL: GIRLS	AVERAGE DAILY ATTENDANCE: MONTH ENDED MARCH 22ND, 1933: OTHER EDUCATIONAL INSTITUTIONS (CLAIMANTS): BOYS	OTHER EDUCATIONAL INSTITUTIONS (CLAIMANTS): GIRLS	TOTAL NUMBER OF SEPARATE INDIVIDUALS WHO HAVE ATTENDED SINCE APRIL 1ST, 1932: J.I. CENTRES AND CLASSES	OTHER EDUCATIONAL INSTITUTIONS
London .	890	414	4	—	894	414	—	—	16,070	—
South-Eastern.	773	414	20	19	793	433	278	250	7,058	1,664
South-Western	365	166	45	27	410	193	194	103	4,274	752
Midlands	745	399	57	10	802	409	295	204	12,434	2,336
North-Eastern.	1,847	702	2,071	99	3,918	801	283	291	27,271	1,576
North-Western	2,218	1,381	341	177	2,559	1,558	182	227	34,098	1,208
Scotland.	1,474	997	939	172	2,413	1,169	221	186	22,178	1,793
Wales .	809	125	1,474	330	2,283	455	110	57	13,677	582
Great Britain .	9,121	4,598	4,951	834	14,072	5,432	1,563	1,318	137,060	9,911

This may be compared with the following table for the number of juveniles on the registers of employment exchanges and juvenile employment bureaux at March 20th, 1933 :

NUMBERS OF JUVENILES AGED 14 AND UNDER 18 ON THE REGISTERS OF EMPLOYMENT EXCHANGES AND JUVENILE EMPLOYMENT BUREAUX AT MARCH 20TH, 1933

DIVISION	BOYS			GIRLS		
	INSURED 16 and UNDER 18	UN-INSURED 14 and UNDER 18	TOTAL	INSURED 16 AND UNDER 18	UN-INSURED 14 AND UNDER 18	TOTAL
London	4,468	2,826	7,294	3,136	2,542	5,678
South-Eastern	2,261	1,785	4,046	1,926	2,074	4,000
South-Western	2,278	1,781	4,059	1,558	2,043	3,601
Midlands	4,574	2,711	7,285	3,399	2,406	5,805
North-Eastern	8,759	6,788	15,547	4,382	6,932	11,314
North-Western	7,444	5,342	12,786	5,941	5,013	10,954
Scotland	5,489	5,798	11,287	4,271	5,302	9,573
Wales	3,097	2,851	5,948	1,017	2,696	3,713
Great Britain	38,370	29,882	68,252	25,630	29,008	54,638

It will be seen that less than 25 per cent. of insured unemployed boys and less than 20 per cent. of insured unemployed girls were attending an instruction centre, the percentage of attendance of unemployed uninsured juveniles being smaller in the case of boys and insignificant in the case of girls.

The number of junior instruction centres and classes in existence on the same date is indicated by the following table :

DIVISION	NUMBER OF CENTRES OPEN			NUMBER OF CLASSES OPEN		
	BOYS	GIRLS	MIXED	BOYS	GIRLS	MIXED
London and South-Eastern	4	1	9	5	1	2
South-Western	1	1	1	3	2	—
Midlands	3	1	2	3	—	—
North-Eastern	20	5	2	2	2	—
North-Western	17	11	3	2	1	—
Scotland	20	11	8	4	2	—
Wales	15	2	2	2	—	—
Great Britain	80	32	27	21	8	2

The juveniles attending other educational institutions were distributed among no less than 500 institutions, 150 for boys, 114 for girls and 236 mixed.

The junior instruction centres and classes are conducted by

local education authorities with the assistance of grants from the Ministry, usually at the rate of 75 per cent., with a higher percentage up to nearly 100 per cent. paid in the case of certain depressed areas. The cost to the central exchequer of the normal centre is about £6 5*s.* per juvenile per annum, and of the other centres about £8 5*s.* Most centres are open for 30 hours a week, taking two separate sets of scholars for 15 hours each, but in some areas the centres are open for 20 and even 25 hours per juvenile. The total cost to the Exchequer for the service at the date which we are considering was about £150,000 per annum, including £20,000 for travelling fares. About 42 per cent. of the cost was recovered from the Unemployment Fund. The cost to the Exchequer per head per week is estimated at between 3*s.* and 3*s.* 6*d.*

Educational Value of the Junior Instruction Centres

In estimating the educational value of these centres, it is, of course, essential to consider the length of attendance. The fact that, on a comparison between the weekly attendance and the annual turnover, the average length of attendance would appear to be two months must not be taken as indicating the usual length of attendance. On a sample survey taken by the Ministry of Labour at a number of centres on December 31st, 1932, it was found that, while about 45 per cent. of the boys attending had been unemployed for more than eight weeks, about one-third had been unemployed for less than a month. In the case of girls, about one-third had been unemployed for more than eight weeks, but more than one-half for less than a month. Until 1929, this system of junior instruction centres was regarded as purely ephemeral. The present scheme was adopted for an experimental period from January 1st, 1930, to March 31st, 1933, and is being continued up to March 31st, 1934. The Royal Commission on Unemployment Insurance recommended that the provision of these centres "should be regarded as a permanent and most valuable part of the provision for dealing with juvenile unemployment in all areas, and that local education authorities should regard them not as a temporary and makeshift but as a serious part of their responsibilities." Nevertheless, individual centres and classes must, to some extent, be ephemeral as employment conditions change. London offers an example of this since, before 1929, there was no need for centres there. The smaller centres and classes are fairly frequently opening and shutting, but the larger centres have a fair degree of stability.

The small percentage of unemployed juveniles between 14 and 18 covered by these centres in the past is, of course, very largely accounted for by the fact that juveniles have not become insurable until the age of 16, and until that age their attendance at such centres is purely voluntary. Moreover, juvenile claimants to benefit must necessarily have had work in thirty weeks since

reaching the age of 16, and they are, therefore, *ex hypothesi*, fairly good industrial lives approaching the age of 17.

The curriculum of the centres is largely left to the local education authorities, but they are expected generally to follow the model laid down in the First Report of the National Advisory Council for Juvenile Employment. The general principles and the summary of this programme are as follows:

General Principles

(*a*) The training provided at centres shall not be regarded as training for specific occupations.

(*b*) The training in the main and for the majority of juveniles shall be practical in character, aiming at the development of manual dexterity.

(*c*) The object of the centre shall be—

(i) to give juveniles during periods of unemployment an interest in life so as to avert deterioration, which inevitably sets in when young people are without occupation and cannot, on their own initiative, provide for themselves interests of a formative character, and

(ii) to raise the standard of "employability" by participation in the various activities provided at the centre.

Summary

(1) In formulating a pattern scheme for centres lines too rigid should not be laid down for the control of the curriculum. Wide discretion must be left to organisers and teachers to develop their own schemes according to conditions in each area and to the type of boys in attendance; subject, of course, to any limits as to cost per head that may be laid down later.

(2) Where possible juveniles under 16 should be grouped together apart from those over 16, and their curriculum should include a larger proportion of normal school subjects than that of older juveniles.

(3) The curriculum should be weighted in favour of practical subjects, except in exceptional cases where other subjects are more suitable from the point of view of the vocation and type of juveniles.

(4) While games and recreation should have a proper place in the activities of the centre, the time devoted to them should be strictly limited.

The actual way in which these principles are being carried out is indicated by the following summary of the curriculum for 1932–3 of the Leeds Instruction Centre conducted on the premises of the Burmantofts Boys' Club of the Y.M.C.A.

Handicrafts—(5 hours 20 minutes per week).

Metal Work.—Dismantling, cleaning and reassembling bicycles, sewing machines, motor-cycles and gears. Executing running repairs. Repairing pneumatic tyres. Stripping, cleaning and reassembling, and the working of model engines.

Making and use of straight-edge; callipers and squares. Forging, hardening and tempering small tools. Running plastic metal bearings.

Use of screwing tackle. Filing and scraping metal surfaces.

Instruction in parts of lathe and accessories. Tools and cutting angles. Plain turning, e.g. cross head pin; screw pin and taper pin. Use of boring bar and drilling. Slotting for keys. Screw chasing and screw cutting. Use of change wheels.

Printing.—Printing of small bills, tickets, envelopes, statements, invoice forms and memos.

Woodwork.—Making of wooden household articles. Grinding,

sharpening and setting of woodworking tools. Decorative woodwork, fretwork, staining and polishing. Renovating polished furniture, picture mounting and frame making. Wood turning and model making.

Tinsmithing.—Making of small domestic utensils. Repairing and soldering household pans, etc. Making of sheet-metal trays, boxes and toys from disused canisters.

Electrical.—Fixing and caring for electric bells and batteries.

Boot and Shoe Repairing.

Upholstering.—Making of buffet tops, chair seats, etc. Re-webbing pincushion and sprung seats. Re-gimping; carpet and mat binding. Stool making and rug making.

Domestic Jobbing.—Knife grinding and setting. Carpet and lino planning. Lock repairs and key fitting. Replacing window cords and washers on taps.

Physical Training and Games—(2 hours and 40 minutes per week).

As per the Board of Education Syllabus and Army Recreation Games; together with syllabus as set out by the National Y.M.C.A. Physical Work Director.

General Subjects and Lectures—(5 hours and 20 minutes per week).

English.—Reading, composition, use of books, business and private letter writing. Replying to advertisements. Talks on English literature, standard books, standard English and slang. Lantern and topical lectures. Talks on civics and industrial history.

General.—Arithmetic and mensuration as applied to handicrafts. Commercial arithmetic. Mensuration and approximations. Drawing (scale, model and geometrical). Formulæ and constants.

Special Subjects.—Commercial, Mathematics, Languages, etc., for selected boys.

Co-operation between Government Institutions and Voluntary Organisations

This use of a boys' club for the purpose of an " official " junior instruction centre is an instance of a movement which is beginning, but which has not yet gone very far; and opinions may differ as to its future. A number of boys' clubs have recently opened their premises in the day time for unemployed boys who have not hitherto come within the scope of unemployment insurance. It is at least possible that such clubs, aiming as they do specifically at providing for boys between the critical ages of 14 and 18, and being not much concerned, as are other juvenile organisations, with boys below that age, might offer the natural focus for a concerted effort for the continued education of all working boys after they have left school; and, in particular, for those who have either no employment at all or whose employment is irregular. This could, however, only be possible if a close alliance could be established between them and both the " technical " classes of the local education authority and the junior instruction centres of the Ministry of Labour. The chief difficulty in extending the activities of the boys' clubs in this way is that such an extension depends largely on the existence of whole-time Club Leaders, of whom there are not a large number at present. Some people think the future lies with the large Central Club, with, perhaps, a chain of smaller clubs attached, acting as the co-ordinating centre for probation services, juvenile employment, after-care committees,

medical services, etc. Whatever may be thought of these visions of the future, there seems little doubt that, however much the government may extend its action in this field—whether by raising the school-leaving age, or by the establishment of compulsory day continuation classes, or by some measure of control, through apprenticeship legislation or otherwise, over the entrance of juveniles into industry—such an extension of government action, if it is to be effective, must not be regarded as superseding the work of voluntary organisations, but on the contrary will make new demands upon them.

Old Scholars' Clubs

Another focus of voluntary organisation, which may become of great value in promoting co-operation between government institutions and voluntary bodies, is provided by the Old Scholars' Clubs. These clubs have sprung into being in connection with the elementary schools and their possible significance is discussed in the pamphlet of the Board of Education to which we have already referred.

Adult Education

This description of voluntary juvenile organisations is, of course, by no means exhaustive and, in particular, it has not covered the juvenile work carried on by bodies primarily concerned with the education of adults. Movements, for instance, like the Adult School Union have a juvenile side. It is, indeed, impossible to separate the adult education movement from the juvenile movement, and it is becoming less and less possible to do so now that the problem of unemployment, especially in the " depressed " areas, is leading to entirely new developments both in adult and in juvenile education.

The voluntary bodies concerned in adult education were described in the YEAR BOOK for 1932 and the information need not be repeated here. We must, however, indicate generally the sort of developments which are now taking place. The significance of those developments will be dealt with in the next chapter on " The Dynamics of Adult Education."

Unemployment and Adult Education : The Educational Settlements Association

The sort of development which is taking place within the framework of the established adult education organisations may be indicated by the instance of the Educational Settlements Association. A number of settlements federated themselves, as it were, in this association in 1920, and it now comprises 23 educational settlements and 6 residential colleges for workers. The residential colleges are intended to specialise for certain types of students : Ruskin College at Oxford and Fircroft College at Bournville, Birmingham, for the industrial worker ; Avoncroft

College, Worcestershire, for agricultural labourers and rural workers ; Hillcroft College, Surbiton, for women ; Coleg Harlech, Harlech, for workers in Wales ; Woodbrooke, Selly Oak, Birmingham, a rather different institution, for students of international, social and religious subjects. The educational settlements aim at providing a permanent local home for adult education in a given area, their programmes generally including English and possibly two foreign languages, history, philosophy, literature, economics, political theory, music, play reading and play production, with some craft and some physical training classes. Of these settlements, five are in the London area (Balham, John Woolman, Mary Ward, Toynbee Hall and Walthamstow) ; three in the Tyneside area (Bensham Grove at Gateshead, Lemington, and Rock House at Seaham) ; four in South Wales (Maes-yr-Haf in the Rhondda, Dowlais, Merthyr and Oxford House at Risca) ; two in Gloucestershire (The Folk House at Bristol and Deancroft at Cinderford) ; two in Cheshire (The Beacon Guild at Wilmslow and Beechcroft at Birkenhead) ; three in Yorkshire (Swarthmore at Leeds, York, and Woodlands near Doncaster) ; one at Reading (Holybrook House) ; one at Letchworth ; one at Rugby (The Percival Guildhouse) ; and one at Plymouth.

This is a rough summary of the original and normal scope of the association, but the number of settlements in the " depressed " areas is a sign of the change which has been taking place during the last few years. In these areas the settlements have been changing from normal educational centres to what can only be described as salvage institutions. In particular, the history of Maes-yr-Haf in the Rhondda is instructive.

The Maes-yr-Haf Settlement

Opened in the spring of 1927, soon after the end of the coal stoppage, it at first incorporated an Adult School started the year before, added other similar schools and formed them into a subunion of the Adult School Union, and organised a number of ordinary educational classes. But, from the onset of intense distress in the following year, it became a centre for constructive " relief " work of the kinds which have now become familiar, such as boot repairing and sewing classes, provision of allotments, etc. As it became increasingly evident that the distress was not a merely temporary phenomenon, this work took on a more permanent character. By August 1929, 52 Clubs for Single Men had been established and, on the basis of the women's adult schools which had been opened in 1927, a number of craft classes for women were established, culminating in the establishment of a Weaving School. Also, by the end of 1932, the girls' clubs in connection with the settlement had a membership of over 500. One of the most recent developments has been the establishment of a new series of Unemployed Clubs. There are now eighteen groups of these clubs with a total membership of nearly 3,000,

with ten Sewing Groups for women attached to them, having a membership of between 400 and 500. This is a very incomplete sketch of the activities of this settlement, but it will be sufficient to indicate that its work is radically different both from the normal activities of an educational settlement and also from the old " social settlement " of pre-war days.

The Occupation Centres

Moreover, during the last twelve months, a new movement on similar, though less highly organised, lines has appeared and is extending itself over the whole country in the form of a network of Occupation Centres for the unemployed. These owe their existence mainly to local initiative, assisted by established organisations like the Adult School Union, but with the general encouragement of the National Council of Social Service which was selected at the beginning of last winter by the Government as the best co-ordinating agency. There were, at the beginning of the winter of 1933, more than 500 of these centres in active operation and others are being formed. These centres, while primarily for adults, have stimulated the formation of boys' clubs. It is impossible, within the scope of this chapter, to give any adequate idea of the range of educational work carried on at these centres. In some it is very weak, in others well developed ; in most it probably mainly takes the form of craft work and physical training, though in some teaching of a more literary kind is beginning to be carried on. A national committee has been formed, under the auspices of the Institute of Adult Education and with the encouragement of the National Council of Social Service, to consider the educational problems involved. It is already evident that, here again, such educational work must be carried out by means of a close alliance between local education authorities and the voluntary centres. To some extent special classes for the unemployed are being organised under the Board of Education Regulations for Adult Education by the Workers' Educational Association and other bodies, and are being assisted by grants from the local education authorities. In the school year 1932–3 there were 51 such classes in operation, the majority of them (32 in number) being in Wales. The London County Council started a scheme for day classes for the unemployed at the beginning of the winter. But co-operation between the Occupation Centres and the local authorities is, as yet, only in its infancy.

Ministry of Labour Training and Instruction Centres

In thus sketching the field of adult education in connection with unemployment mention must be made of the eight Training Centres and the eleven Instruction Centres which were being operated by the Ministry of Labour at the beginning of the winter. The function of the Training Centres is to give a six-months' intensive course of training for a trade to selected men from the

depressed areas ; that of the Instruction Centres is to give other selected men from these areas a three-months' training course to fit them for labouring work.

The Demand for a New Education

In this chaotic development of voluntary initiative and experiment, embracing much that cannot be regarded as education in any real sense, it may be difficult for the " educationist " to discern any great hope for the future. It obviously represents a great educational opportunity, but to many people it will seem an opportunity to bring new drilled battalions into the trench warfare of the organised schools, rather than an opportunity for an educational advance into new fields. Yet the very opportunity, on its present scale, is a demand for something new, for it marks a breakdown—and, the opinion may be hazarded, a permanent breakdown—in the old social and economic machinery of the nineteenth century. A reconstructed economic and social order must make new demands upon organised education ; and the nature of those new demands is more likely to become evident, first of all, outside the walls of the schools than inside them. It is the institutions of organised part-time education, maintained by the local education authorities, which will first feel the impact of this new demand, as indeed they are already beginning to feel it ; and it is no doubt true that purely voluntary educational work will be able to do little more than prepare new bodies of students for the teaching of these organised institutions. But such students, as they come forward, will, in all probability, force a far-reaching change in the character of these institutions. They may, indeed, find it wholly impossible to cope with the task unless they develop themselves from technical schools, giving a certain amount of non-technical teaching, into Local Colleges embracing the whole range of part-time education, both for juveniles and for adults. Moreover, such Local Colleges must have a more than merely local significance ; they must be regarded as units in a graded national scheme. It is clearly useless to envisage some more coherent organisation of voluntary effort in the future, as we have suggested for boys' clubs, without envisaging at the same time a more coherent organisation of public institutions, and particularly the creation of Regional Colleges, acting as centres of part-time higher education for a number of Local Colleges.

Of the nature and direction of the new education which will thus emerge in part-time institutions, and will then begin to exert a growing influence upon the elementary and secondary schools, it is yet too early to speak. It will be concerned partly with improved methods and standards of education for organised industry ; and for that reason we have included in this Section a study of education for a particular industry now undergoing great changes—the cotton industry. But it will also have to be

increasingly directed to those deeper problems of the individual needs of the modern man and woman, which are touched on in the next chapter on " The Dynamics of Adult Education." And, in judging and meeting these needs, the new education will have to take into account a consideration too undefined as yet to be discussed here: the probability of a reversal, in greater or less degree, of the tendency of the nineteenth century towards the large-scale organisation of production, and the emergence of a new tendency towards an increasing de-specialisation of labour and a consequent *localisation* of life and livelihood. Such a tendency would involve a fundamental change in our whole conception of skilled labour and a no less fundamental reconsideration of the meaning of that well-worn phrase, " education for leisure." Clubs and instruction centres for unemployed juveniles, occupation centres and classes for unemployed adults, may seem to the educationist a tangled wilderness occupied mainly by nomadic amateurs; but it is from such wildernesses that a new message is apt to come to an ordered civilisation, which that civilisation has then to set its organised institutions to learn and transmit.

E. P.

CHAPTER FOUR

The Dynamics of Adult Education

THERE comes a time in the history of every movement when, like Cæsar at the Rubicon, it is called upon to decide whether it shall be content to remain of limited significance and partial achievement, or whether it shall undertake new and wider responsibilities beyond the lines of its traditional growth. Such a position exists to-day with regard to the adult education movement, which finds itself after forty or fifty years' development taking stock of its achievements and becoming aware of opportunities for expansion which are beyond the dreams of those who initiated it.

The Motives of Adult Education

Nineteenth Century : Supplying Educational Deficiencies

The motive which originally moved the pioneers of adult education in the University Extension and University Tutorial Class movements was to make good in the adult certain educational deficiencies arising either from incomplete schooling in youth or lack of contact with current thought and knowledge during mature life. Indeed, England's recognised pre-eminence in the development of adult education arose because, during most of the nineteenth century, she was admittedly backward in her school educational system. In those countries, such as Scotland, where secondary and University education were accessible to more children, adult education took less root, being regarded as an educational " second-best " and not of great importance so long as the school and University were doing their job properly.

The Mechanics' Institutes and the early adult schools were frankly founded upon this principle of supplying an educational deficiency and, since the deficiency was obviously most marked among the wage-earning classes, adult education was early correlated with workers' education, and sought to cater primarily for those who could not afford to educate themselves or take advantage of facilities costing money. As is the way with all educational developments in this country, the movement took shape first in the form of voluntary activities. Later, when these crystallised into an educational habit, the Government, the local authorities and other statutory bodies came to assume responsibility for their continuation. Actual illiteracy and gross lack of technical and scientific knowledge were the first educational deficiencies which had to be met a century ago by the early adult schools and Mechanics' Institutes. By the third quarter of the nineteenth century this deficiency had been to some extent remedied through the springing up of technical and art schools and the establishment of State-provided elementary educa-

tion. Then began the second phase, in which adult education took on the character of an extension of the humane studies as carried on at Universities to the public outside their walls. The wage-earning classes were beginning for the first time to enjoy an appreciable amount of leisure time, and the Universities took up the idea of providing facilities for intellectual self-improvement as a spare-time occupation, always, however, with the idea of making good the knowledge or training which had been missed by the adult through not having had the benefit of higher education in youth.

Early Twentieth Century : Higher Education for Selected Students

We know that the University Extension movement in the last quarter of the nineteenth century to some extent missed its mark, since it failed to strike deep roots in working-class audiences. This was left to its successors, the University Tutorial Class movement and the Workers' Educational Association. But it is important to observe what were the objectives, and therefore how limited has been the appeal, even of this kind of adult educational activity. In the first place, the range of subjects studied was mainly literary and economic. By no means was the complete University, with all its different faculties, " extended " beyond its walls, but only a few departments of it, and those chiefly the most academic, the most concerned with book-learning and the least with laboratory or practical work. The failure of the adult education movement at this stage to find students and create facilities for study in scientific subjects is the strongest evidence of its one-sidedness in this respect. Secondly, the method of study developed was a conscious imitation, or rather adaptation, of the best-known methods of internal University teaching. The lecture, the discussion and the travelling library formed together an educational instrument suited to small selected groups of earnest, keen students anxious to give up a good portion of their spare time to intensive study—and by study was understood book reading and the writing of essays and papers. Thirdly, the character of the audiences reached was necessarily conditioned by the subjects studied and the methods of study employed. It was a kind of adult education suited for the natural student or for the ambitious individual who believes that academic qualifications are one of the means to a successful career.

In the early days of the twentieth century, when the first rush of working-class students into Tutorial Classes took place, there may have been some who dreamed of a whole adult population composed of scholars striving to attain a University standard of learning. If so, however, the dream was soon dissipated. Whilst the University Extension course became in the main an educational facility for the leisured middle classes, the University Tutorial Class attracted only an infinitesimally small proportion of industrial workers. Indeed, the theory was soon evolved that this kind of adult educational facility was intended, not for the rank and file of the industrial population (to the rural population it made no appeal at all), but for

its would-be leaders. It was imagined as a leavening influence, giving an intellectual training to leaders in the trade union, co-operative and political Labour movements; and unfortunately it is by the standard aimed at in this training—a standard only fitfully reached by those even in Tutorial Classes—that the claims and achievements of so many other later adult educational developments have tended to be judged, particularly in official circles concerned with the granting of money for the purpose. Consciously or unconsciously, these influences tended to create a conception of adult education as a minority interest—something inaccessible, even dull and boring, to the great mass of the naturally philistine population, something reserved as a privilege for the intellectually minded minority, particularly in the working classes.

Post-War : Recreation for the Ordinary Citizen

The war caused an undoubted break in this rapidly hardening tradition, and at its conclusion the circle of adult education began to widen with surprising rapidity. A great variety of new voluntary bodies entered the field, distinguished from such older organisation as the Workers' Educational Association by the fact that their purpose was not primarily educational. To such bodies as the Y.M.C.A., Y.W.C.A., Women's Institutes and Working Men's Clubs, adult education presented itself as one of many desirable activities to be included in a wide programme of social, recreational and propagandist work. A motive latent in all adult education now became more prominent—the gregarious impulse which induces isolated men and women to make contact with their fellows in groups for some kind of purposeful activity, which includes the interplay of ideas and tastes. Consequently, the constituency of adult education was enlarged in a few years much beyond the limited circle of the would-be scholar anxious to repair the educational deficiencies of his early life. Now came in men and women frankly repudiating any intention of seeking intensive or prolonged intellectual discipline and training, but on the other hand eager to find self-expression through activities of a semi-intellectual, semi-social character, such as the performance of plays, the learning of handicrafts, the study of domestic subjects and the engagement in short courses of training for propaganda work in social or international causes.[1]

The Popularisation of Adult Education

The Local Education Authorities

The original core of Tutorial Class and extension students pinning their faith to University standards of education remained, forming in its own opinion a kind of intellectual aristocracy in the movement, often contemptuous of the "lowbrow" fringe on its outskirts. But simultaneously with this diversification of voluntary activity in

[1] See *Adult Education and the Local Education Authority*, Paper No. 11 of the Adult Education Committee of the Board of Education, 1933.

adult education, there appeared a parallel institutional growth reflecting to some extent the greatly increased interest taken in the movement by local education authorities. In the half-dozen years following the Armistice, adult education secured a recognised place in the programme of most local education authorities providing higher education. Sometimes this took the form of grant aid to existing or new voluntary activities, but in other cases, as in London, the authority itself embarked upon a substantial provision of adult educational facilities of its own in Institutes. In both these developments we see the newer conception of adult education as a social and recreational activity coming to the fore. The localised evening institute in particular (as had been already discovered by the voluntary agencies which created settlements in the larger towns) offered opportunity for experiment in the less formal and more attractive kind of education. Only, the fact of localisation was itself a bar to the popularisation on a large scale of this new informal education method. The local authority could provide the most varied programme of facilities on its chosen premises, but it could not thereby reach that great proportion of the adult population which does not feel sufficiently the social or gregarious impulse to make deliberately a place in the programme of its everyday life for a visit to a social or recreational centre.

Distaste for Formal Education

Thus, within a very few years the adult education movement had greatly expanded its range and scope, popularised its methods and appeal, and affected a greater proportion of the urban, and even of the rural, population. Numerically, however, the extent of its operations was still small enough. Out of a population of some 40 millions, not more than 200,000 or 300,000 were being affected at any one moment by all the adult educational forces of the whole country. This fact has a psychological importance. From the time when elementary education was made compulsory, for perhaps forty years, generations of children grew up to think of schooling with the feeling of distaste that always accompanies the sense of compulsion. Consequently, at the very time when adult education early in the twentieth century entered on its modern phase, it was appealing to a generation of adults who either consciously or unconsciously were prejudiced against education as such, regarding it as something enforced by a minority (teachers, Governments, local authorities and University professors) on a passive majority. Of course it is perfectly possible to find within that majority groups whose enthusiasm for the benefits of education overrides any sense of antipathy imbibed in early life through school discipline ; but it is an undeniable fact that the tradition of English public opinion is on the whole unfavourable to education, although respectful towards it so long as its claims are strictly limited. At no time in our recent history has education been nationally popular, as is proved by the fact that educational reformers have rarely desired to put their

proposals to the popular vote, and have preferred to press for them by more indirect methods. This unpopularity of education has more serious effects in adult education than in school education, for in the latter the children who are to be compulsorily educated have no voice in the matter, whilst it is of the essence of the former that the adult shall *voluntarily* undertake educational activity himself.

Wireless, Film and Gramophone

It is therefore natural that, when adult education had exhausted the impetus of its initial appeal to the student-minded minority of the population, it should find itself faced with the need for widening its scope and changing its methods so as to become more truly an instrument of national culture and not merely a privilege of a small section of the community. The work of the local education authorities, as has been noted in the latest paper issued by the Adult Education Committee of the Board of Education, has contributed much to this widening process; but a still more powerful force operating in the same direction has been the evolution during the last few years of the new instruments for mass entertainment and mass education which science has placed in our hands; that is, wireless, the film, the gramophone and kindred inventions. These inventions, primarily of use for entertaining audiences of millions, have admittedly a profound educational potency applying equally to adults and to children. It is not from their direct instructional use that this potency arises. Indeed, their precise place in the classroom and the lecture-room is still in the experimental stage and has yet to be finally determined. Their educational significance is indirect. The scale of their use as instruments of common entertainment makes it impossible for the State to remain indifferent to their effects upon the thought and habits of its constituents. We already know enough of broadcasting and the film to realise that they influence the tastes, opinions and actions of the millions who enjoy them, though that influence may be more or less unconscious.

The B.B.C. and the Film Institute

The English adult education movement was not blind to this aspect of the new inventions, and from 1927 onwards constant enquiries and experiments have gone forward with a view to exploring and exploiting their possibilities. The British Institute of Adult Education first co-operated with the B.B.C. in setting up Sir Henry Hadow's Committee of Enquiry into educational broadcasting[1]; and later became one of the parent bodies of the Commission on Educational and Cultural Films. The former of these led in due course to the setting up by the B.B.C. of the Central Council for Broadcast Adult Education and a number of Area Councils, and to the rapid formation of wireless discussion groups in all parts of the country. The latter has only recently borne fruit in the establishment of a British Film Institute along the lines recommended in the

[1] *New Ventures in Broadcasting.* B.B.C., 1928.

Report, *The Film in National Life*.[1] Still later, the British Institute of Adult Education set up a Commission of Enquiry into the educational uses of the gramophone, which is now at work.

One result of these developments has been to widen still farther the range of adult education. Through broadcasting, a great many more organisations and individuals awoke to an interest in educational and informational talks than had ever before made contact with formal class work. The same is true of the film, where educational and commercial interests found themselves brought into an unexpected contact—a contact which has laid the foundations of an interesting partnership in the organisation of the Film Institute, and which promises in time to have a good effect upon both parties. In the constitution of the new Film Institute, indeed, we have an experiment unique in form so far as adult education is concerned. The control of the Institute is based on a three-fold division of representation between the cinema industry, formal education and the interested public. Machinery of the same kind is springing up in the provinces as well as at the headquarters in London.

The New Technique of Broadcasting and the Film

What effect is this incursion of new forces having upon the older adult education movement? In the first place, it has involved the discovery of a new technique of popular address. Just as the older type of University lecturer, accustomed to dealing with undergraduates in a lecture-room, failed in most cases to make a successful tutor for working-class students in University tutorial and other extramural classes, so in his turn the successful tutorial class tutor has not generally proved a popular broadcast talker, nor is he likely to be effective on the film. The methods of appeal required for small earnest groups of students on the one hand, and unseen audiences of millions on the other, are so different that a new class of persons possessing the imagination and adaptability necessary for the use of the new medium has sprung up. In the case of broadcasting, the distinction between the formal adult educational series of lectures and the informal popular talk wears thin, while the cultural elements of the rest of the programme, musical, dramatic, etc., gain in significance as time goes on. In the case of the films, the almost total absence hitherto of any attempt to use the film for instructional purposes for adults leaves the field clear for all kinds of experiment in the development of its general cultural uses. Churches, social movements, political organisations and propagandist bodies of all kinds play a part in this development.[2] The emphasis here is not upon deliberate instruction so much as upon education as a by-product of some kind of activity which is held to be of service to the community as a whole. A beautiful film of an

[1] *The Film in National Life*. Allen & Unwin, 1932.

[2] See *The Film in Politics* (article in *Sight and Sound*, Summer, 1932) and *The Film in Religion* (*Sight and Sound*, Autumn, 1932).

old English town may be made by the Travel Association to attract foreign tourists to this country, but the film is found to have a secondary value as " adult education in its widest sense " in helping English people to appreciate and understand their own civilisation. An industrial firm of national standing, such as Cadbury's, Lever's, or His Master's Voice, may have a film made to give publicity to its own product, but in fulfilling this primary purpose it supplies material of educational value to the public which sees it. We are, indeed, but slowly discovering that the adult is far more susceptible to the indirect educational process than to the direct. How to make use of this psychological truth is the problem which confronts the educator to-day.

Reaction against an Over-literary Education

A second consequence of the entry of broadcasting, the film, etc., into the educational field has been a realisation of the excessively literary character of the older type of adult education. Since for hundreds of years in the past it has been an axiom that children could only be educated by being taught to read and write and then made to pore intensively over books in classrooms and studies, it seemed to follow that for the adult who wished to pursue his studies in later life, his educational deficiencies could only be made good by turning him into a book student. In the tutorial class, for instance, extreme prominence is given to the reading of books and the writing of essays, these being still the only recognised tests of the student to be achieved. But this scale of values will never do for adult education in its wider connotation, for it overlooks the fact that the very great majority of our adult population to-day lives, works and plays without (and often with contempt of) literary study of any kind. Anyone who makes a canvass of the houses of his friends, whether in the middle or working class, will discover that in perhaps 80 or 90 per cent. of households there are practically no books (apart from fiction, magazines and newspapers) either possessed or habitually borrowed and read. A four-hundred-years' tradition of literary culture and education has failed to produce a literary people, even in the country which prides itself upon possessing the finest literature in the world. Perhaps we have attained this pre-eminence at the cost of stunting our visual (artistic) and aural (musical) culture, but the result has not been to create a nation of readers, still less a nation of students.

Now both broadcasting and the film have opened the doors upon a new kind of culture, which while not hostile to, is nevertheless independent of, the printed book. Millions of artisans, traders and clerks, with their wives and children, can listen in or go to the pictures and receive direct æsthetic enjoyment, information and imaginative stimulation without using instruments which are evidently distasteful to them. And they are right in this preference, in so far as actual seeing with the eyes and hearing with the ears are more direct methods of gaining experience of life and materials for

judgments about it than interpreting the symbols of the printed word. The attraction of wireless and the film lies in the sense that their audiences have that they are in contact with something real and spontaneous rather than something second-hand and academic. Moreover, both these two media are primarily associated in the mind of the public with the idea of entertainment and amusement. Consequently they do not rouse psychologically the same hostile reaction in the mind of the ordinary man in the street as does the prospect of contact with formal education. Through a cautious and indirect development of the educational possibilities of wireless and the film, a real popularisation of adult education such as has not hitherto been known can take place.[1]

Education for the Unemployed

It must not be thought that these are the only directions in which the adult education movement has found itself brought up against the problem of bridging over the gap between the needs of the student minority and the tastes of the philistine majority. The same kind of problem has been encountered both with regard to the stimulation of adolescent education and more recently in the attempt to provide educational facilities for the unemployed. In both cases it has been found that the older methods and the more literary forms of adult education make only a limited appeal. A fresh approach has to be worked out in terms of human interest and economic need by the cultivation of the activities of the hand as much as the activities of the mind. For instance, in the case of education for the unemployed, the purpose of the whole educational process seems to be undergoing a change. For some years after the War emphasis centred upon the notion of " education for leisure "—a slogan which had meaning for a generation enjoying shorter hours of work and a higher standard of living than ever before. But to adults suffering from prolonged unemployment, the phrase has no meaning. It is, indeed, a kind of mockery. The emphasis therefore tends to shift back to a practical quarter. What kind of destiny is in store for those to whom the appeal is to be made, and for whom the facilities are to be provided ? The answer to this question must determine the nature of these facilities. Education, in short, must be oriented so as to contribute something practical towards the life which has to be lived by those who are to avail themselves of it. This swing of the pendulum towards the utilitarian principle is noticeable in school education, and it is beginning to show itself in adult education also.

Need for a Survey of Popular Tastes

Thus the " nationalisation " of adult education, that is, the turning it from being a sectional into a truly communal service, is the prob-

[1] *The New Learning.* Workers' Educational Association, 1932.

lem which the existing adult education movement is called upon to face to-day. Naturally there is found resistance in many quarters to the recognition of these realities. Adult education is still too much divorced from vocational training. It is still dominated by literary standards of achievement. Still, the signs of a broadened outlook and a desire to humanise what has hitherto been predominantly academic is noticeable. But before this tendency can go very far a foundation has to be laid in the form of more accurate knowledge of the cultural habits and tastes of the community. Our knowledge on this subject is absurdly fragmentary. Who knows anything that is not based upon guess-work about the literary, musical, scientific and artistic opinions and tastes of the mass of Englishmen? In regard to book reading, for instance, it is almost a disgrace that the research officers of the press-advertising contractors should have compiled far more extensive and accurate statistical information concerning the popular tastes in newspapers and magazines than the publishers, booksellers and public libraries together can tell us regarding the public's taste in book reading. Everywhere there is plenty of undiscovered material lying ready to hand, in the experiences of our museums and art galleries, in the use made of cinemas and sports grounds, in the records of local cultural activities, through literary and scientific societies and recreational, social and humanitarian organisations. In the United States, the Americans with their passion for self-knowledge have already pointed the way which we ought to follow. The investigation ordered by President Hoover into current social trends has already produced a crop of valuable studies of cultural life on the other side of the Atlantic.[1] No comparable collection of facts has been attempted in this country. No statistical analysis has been made, for instance, of the tastes of wireless listeners or of the cinema audience. No cross-section has been taken of the social and cultural life of an English village or market town. Even in occupational and industrial groups guess-work does service in place of knowledge when it is a question of "the things of the mind." With all the talk that there has been during the past twenty years concerning leisure and its uses, no one has yet had the patience to try to find out exactly how the mass of the people uses its leisure to-day. The artificial separation between "highbrow" and "lowbrow" must be held partly accountable for this omission. Convention has kept the two categories severely apart from each other, though the urgent need of the moment is to bridge the gap.

Need for an Imperial Survey

An even more urgent field where new ground requires to be broken is to be found in the imperial aspects of adult education. The example set by England in the development of working-class education during the past twenty years has been imitated in many other

[1] See also *Social Planning and Adult Education*, by John W. Herring-Macmillan, 1933.

European countries and in America with more or less success. Each country has naturally tended to develop a form of adult education distinctive to itself, and useful but slender contacts have been built up for the exchange of information concerning the progress made. But to-day in many countries, particularly those of Eastern Europe, adult education is very different in kind from what it is here. Where large masses of illiterate men and women have to be dealt with, methods of instruction and forms of interest have to be developed of which we know hardly anything. Hence the relatively greater development of the film and wireless as instruments of mass education in countries such as Russia. But the British Empire, too, with its varied assortment of peoples at different stages of cultural development, offers a unique ground for experiment in adult education.

So far there has been little or no attempt to think imperially about this problem. The needs of the Indian villager or the African tribesman have hardly yet been understood as falling within the range of what is meant by adult education.[1] But with the breaking down of the academic tradition and the widening of our horizon at home, there will surely be a realisation of the immense responsibilities that lie upon us in regard to the education and cultural life of the peoples of our Colonial Empire. Even in the case of the Dominions there is need for the forging of closer links between the adult educational work which has been developed in Canada, South Africa and Australia and our own movement in Britain. And it is not to British territory alone that our responsibility is limited. In almost every civilised or partly civilised country in the world, and particularly in all the great towns of the world, are to be found large colonies of British people permanently resident there for commercial and other reasons. Culturally these colonies live a life far too isolated from the mother country, a trouble which occasionally is voiced in the correspondence columns of our press. Other countries, with their developing national consciousness (the fashionable tendency of the day), take every opportunity to keep such groups of their own people as may be living in foreign centres closely linked to the parent community. Only in the case of the British our old *laissez-faire* tradition holds too strong, with the result that Britons resident abroad are helplessly ignorant of the achievements and tendencies of thought of their native land. Some means should be found of providing cultural links between the centre and these outlying enclaves—a task which the adult education movement will undertake when it has grown up to the full sense of its national responsibilities.

The British Institute of Adult Education

Such are a few of the tasks which await this movement during the next few years. Before they can be discharged a good deal of

[1] But see *A Scheme for Broadcasting in Rural India.* Indian Village Welfare Association, 1933.

preliminary research will have to be undertaken to provide the accurate data upon which active policy must be based. At present the British Institute of Adult Education is the main, indeed almost the only, body which carries out research in this kind of field. The resources at its disposal will require considerable extension if the task is to be carried through properly. Is it too much to hope that some of the great charitable trusts who have done so much for education by endowing its institutions will rise to the occasion and help this movement to achieve the enlarged stature and widened range which the nation demands of it ?

R. S. LAMBERT.

CHAPTER FIVE

EDUCATION FOR THE COTTON INDUSTRY

I. The Organisation of the Industry

THE cotton industry is divided into three great branches :

(*a*) *Spinning*, which includes all processes from opening the bale of cotton to the production of cotton yarn.

(*b*) *Manufacturing*, which includes the processes used for converting into cloth the yarn received from the spinner.

(*c*) *Finishing processes*, such as bleaching, dyeing, printing and " finishing."

It is proposed to discuss in this article the education needed by persons engaged in the two branches of spinning and manufacture. The educational problems of the finishing branch, whose processes are based mainly on the application of physics and chemistry, differ considerably from those of the other two branches.

It may be worth while to describe in bare outline, for the information of the general reader, the various operations carried out in a cotton mill.

The Work of a Spinning Mill

When the bale of cotton reaches the spinning mill, the material is in a highly compressed state and contains dust, sand, broken leaf and tangled fibres. Its conversion into yarn, as nearly as possible uniform in colour, lustre, diameter, structure and strength, is accomplished by means of a long sequence of machines, some of them of great complexity.

The bale-breaker, opener and scutcher open out the cotton and remove most of the foreign substances mixed with it ; on leaving the scutcher, the cotton is in the form of a thick mat or " lap." The lap is presented to the carding engine, which removes practically all the remaining impurities and converts it into a thin, filmy sheet of fibres, which becomes a thick untwisted rope or " sliver " by being passed through a round opening as it leaves the machine. The sliver is the early form of the yarn, since it contains the mass of fibres in a continuous length, which must be made uniform, attenuated, arranged with its fibres as nearly parallel as possible, and finally twisted ; the functions of making uniform, attenuation, " parallelisation," twisting and winding on bobbins or tubes of paper are carried out by the machines which succeed the carding engine. The sliver is passed successively through a series of draw-frames, which make it more uniform and lead to the arrangement of the fibres which compose it more nearly parallel to one another ; but they impart no twist to it and do not wind it on bobbins. After the draw-frames come the fly-frames, which attenuate the sliver, make it still more uniform and

give a slight twist to the " roving " (which the sliver has now become) before it issues from the last of them and is wound on bobbins. The roving is now " spun " into yarn on either the ring-frame or the mule, still more attenuation and twisting taking place in this operation.

The yarn is now ready for the manufacturer, to whom it goes either wound on ring-bobbins or as " cops," that is, reels of yarn in the form in which they leave the mule spindle.

When fine yarns are being spun, or when yarn is needed for special purposes, additional operations are necessary, but for the sake of clearness and brevity no mention is made of them here.

The Work of a Weaving Mill

The yarn which is to be used as " weft," that is, the threads across the width of the cloth, often undergoes no further operation if it is in the form of cops, as these can be inserted in the shuttle of the loom. If it is to be dyed, it may undergo the operation of winding ; if it is on ring bobbins, it must be re-wound.

The yarn to be used for the warp threads (often called " twist "), which lie along the length of the cloth, must undergo several operations preliminary to weaving itself.

It is first wound on bobbins in order to obtain long lengths, free from weak places, and then transferred—in the operation known as " warping "—to flanged rollers called " beams." It is next " sized," in order to increase its resistance to the friction to which it will be subjected in the loom, and finally wound on weavers' beams, which are then placed in the looms. By means of suitable mechanisms, either forming part of the loom or attached to it, the warp threads are separated in the operation of weaving for the passage of the shuttle ; the pattern of the cloth produced depends on the order in which these threads are separated.

Character of Labour

It will be seen from what has been said above that in both spinning and manufacture nearly all the operations are performed by machines. Many of the operatives engaged in " minding " these machines are women ; but even in the processes usually left to men, the rank and file of the workers are not usually permitted to make any except very minor adjustments of the machines. The task of adjustment is entrusted to foremen, though they are not usually known by that name, but by such terms as that of " overlooker," " tackler," " winding master," etc.—each of them descriptive of the particular function performed.

The foremen, by whatever name they are called, are responsible to a manager, who may himself be subordinate, in a large undertaking, to a general manager or a managing director.

Apart from the clerical and commercial staff, which is usually quite small, there are thus three grades of workers, as a rule : (*a*) operatives in charge of machines, who possess great deftness of hand ;

(*b*) foremen of various types; and (*c*) managers in charge of the whole of the operations of a department or of a mill.

Recruitment and Promotion

Since the cotton industry was one of the first to be centralised in factories, it had at a very early stage to consider how the workers should be recruited. The method adopted was to take boys and girls into the mills and train them to perform the ordinary routine tasks. As they grew older, most of them remained as operatives, while a small minority were selected for posts as overlookers and other officials.

This method, adopted in the early nineteenth century, is substantially that still employed. The industrial career of most of the workers above the rank and file has begun at the age of 13 or 14 by employment as assistants to other operatives engaged in minding a machine (or, in the case of weaving, several machines), supplying this with fresh material, " piecing ends " (that is, repairing breakages of the yarn), and removing periodically the finished material from the machine. When considered sufficiently expert, they have become operatives, carrying out the same tasks as before, though with greater responsibility for the quality and quantity of the output. During this period, first as assistants and then as operatives, they have acquired a considerable knowledge of the machine and of its behaviour under varying conditions, which has in many instances been supplemented by attendance at evening classes at a technical school.

Boys who begin as machine minders are usually ambitious to become overlookers with a more varied occupation and with higher status and pay. A proportion of them receive promotion and are placed in charge of a group of operatives, supervising their work and repairing or replacing worn or broken parts of the machines, which they maintain in good running order; in addition, they see that the output is as good and as large as possible, and that there is the minimum amount of waste of both material and stores.

Many of the men employed as managers on the productive side of the industry have been overlookers, with the educational and industrial antecedents which have been described; although there are no statistics to indicate this with certainty, it is probable that they constitute the majority, especially on the manufacturing side of the industry.

A proportion of them have, however, different antecedents. Some of them, with an assured prospect of a responsible post in the industry through family or other connections, have entered it after being at school up to the age of 16 or more; these have either gone into the business directly and have had an all-round training, or have preceded this by a full-time course at a technical school. Others have been holders of full-time scholarships at a technical college, after having passed with distinction through the evening classes of a textile school. Others again have entered the productive side of the

industry after experience on its commercial side or, in some instances, after being trained as engineers in a works engaged in the manufacture of spinning machinery.

II. The Present Provision of Education for the Textile Industries

Classes for persons engaged in the cotton industry were carried on on a very small scale until after 1879, when the City and Guilds of London Institute initiated its examinations. At first, these examinations included in a single paper both spinning and weaving. In 1889, the examinations in these two branches were separated from one another; in each of them there was included sufficient attention to mathematics and drawing to test the students' knowledge of these very necessary ancillary subjects. During the last few years, mainly through the work of the Advisory Committees of the Union of Lancashire and Cheshire Institutes, the ancillary subjects have been treated separately. There has been, in fact, a process of differentiation and elaboration; Cotton Manufacture was first divided into Spinning and Weaving, and these two parts were then sub-divided into their constituents. This is in accordance with the general tendency towards the clearer definition of the various elements which together constitute the curriculum in branches of technology.

Further, while originally no test was applied to students wishing to enter textile classes, it is now usual to require that they shall have such a knowledge of mathematics, elementary science, technical drawing and English as can be gained by attendance at an evening continuation school.

The Union of Lancashire and Cheshire Institutes

The curricula drawn up by the Union of Lancashire and Cheshire Institutes are as follows:

Cotton Spinning

Senior Course

1st year. Cotton Spinning: Textile Mathematics: Textile Drawing.

2nd year. Cotton Spinning: Textile Mathematics: Textile Science.

3rd year. Cotton Spinning: Textile Mathematics: Textile Science.

Cotton Weaving

Senior Course

1st year. Cotton Weaving: Textile Mathematics: Textile Drawing.

2nd year. Cotton Weaving: Textile Design and Colour: Textile Mechanics.

3rd year. Cotton Weaving: Textile Design and Colour: Textile Mechanics or Textile Chemistry.

The City and Guilds of London Institute

The Advanced Courses are planned to conform with the requirements of the City and Guilds of London examinations for the award of their Full Technological Certificate. They include:

Cotton Spinning

(i) Cotton Spinning:
 (*a*) Cardroom processes.
 (*b*) Spinning and subsequent processes.
(ii) Engineering applied to the Cotton Industry.
(iii) The economics of the Cotton Industry.

Cotton Weaving

(i) Cotton Weaving:
 (*a*) Application of Design and Colour to Woven Textiles.
 (*b*) Manufacture of Woven Textiles.
(ii) Art applied to Woven Fabrics—for Designers: *or* Design and Colour for Woven Fabrics—for Producers.
(iii) Engineering applied to the Cotton Industry: *or* The Economics of the Cotton Industry: *or* Chemistry applied to the Cotton Industry.

A number of exhibitions and scholarships are awarded annually by the Worshipful Company of Drapers to students who distinguish themselves in the examinations held by the City and Guilds of London Institute. The exhibitions and the "minor" scholarships they award are tenable at either evening or other part-time classes in the textile departments of technical schools. The "major" scholarships, whose value is £100 a year, are awarded to more advanced students and are tenable at full-time day courses in textiles; as a rule, they are held at the Manchester College of Technology.

The industry undoubtedly owes a great debt to both the City and Guilds of London Institute and the Worshipful Company of Drapers for their encouragement and generous support of textile education during so many years. The following table, showing the number of candidates examined in Cotton Spinning and Manufacturing since 1873, is of interest:

Number of Candidates Examined

(*a*) *Examinations conducted by the Society of Arts.*

1873–8.	Cotton Manufacture (including both Spinning and Weaving)	88

(*b*) *Examinations conducted by the City and Guilds of London Institute.*

1879–88.	Cotton Manufacture (including both Spinning and Weaving)	4,532
1889–1932.	Cotton Spinning	41,791
	Cotton Weaving	36,021
	Total	82,432

The average number of candidates examined in Cotton subjects by the City and Guilds of London Institute during each of the fifty-four years from 1879 to 1932 has therefore been rather more than 1,500.[1] When it is taken into account that this number represents only those who consider themselves ripe for examination on the conclusion of a course extending over two or more years, it will be realised that the work done under the auspices of the City and Guilds of London Institute has exercised, and is still exercising, a most powerful influence on the industry. It is, indeed, the normal custom for every candidate for a position of responsibility on the producing side of the industry to present one or more City and Guilds certificates as evidence of his fitness to occupy the post he is seeking.

The number of exhibitions and scholarships awarded by the Drapers' Company since 1904, when they made their first awards, is as follows:

Scholarships in Cotton Weaving	54
Exhibitions in Cotton Weaving	101
Exhibitions in Cotton Spinning	70

In addition to these, the Lancashire Education Authority and the Burnley Education Authority award scholarships in textiles, as does also the Textile Institute.

After-Careers of Students

It is not possible to prepare a complete statement as to the after-careers of those students who have held full-time scholarships at the Manchester College of Technology, but from the information that is available, it appears that their occupations include the following: research assistants, managers, assistant managers, liaison officers between the research organisation and the mills, salesmen and teachers. Quite a large number become teachers, four of the staff of the Textile Department of the Manchester College of Technology and practically all the full-time teachers of Textiles in Lancashire having been holders of scholarships at Manchester. Of those employed as managers or assistant managers, a fair proportion are engaged by firms concerned with artificial silk.

Mutual Cotton Classes

Mention should be made of the "mutual" cotton classes which have existed for many years for young men wishing to improve their knowledge of cotton spinning. They are supported entirely by their members, although in some instances they now meet in the textile departments of technical schools and use the plant there. It is usual to admit to them only men who either hold a position of responsibility in the spinning branch of the industry or have gained certain examina-

[1] During the last few years, the number of candidates—especially in the Cotton Spinning Examinations—has declined considerably.

tion successes after attending a technical school. As the name implies, the members of the group meet together for mutual assistance.

Inadequacy of Present Methods of Recruitment and Training

Every system of industrial recruitment and training must, if the industry to which it is applied is to flourish and develop, be so framed and carried out as to select workers completely fitted for the effective performance of the functions entrusted to them. This applies to every grade of workers. The rank and file must be skilful, intelligent and quick of mind and hand; the middle grades must possess these qualities in an even greater degree; and the highest grades must have the qualities needed for control, direction and leadership, for on them is laid the heavy burden of conducting great undertakings, employing the most economical means of production, changing them swiftly as the need arises, and altering the character of the output in accordance with the fluctuations in the demands of the market.

Everyone who is acquainted with the cotton industry will agree that in the past the mills have been staffed generally by men competent to do what was needed for the successful conduct of the industry. Before the war, this country imported every year about a million tons of raw cotton, converted it into saleable goods and sent about four-fifths of the product to distant markets overseas, satisfying the varied requirements of what was literally a world of customers. When one reflects on what is involved in such an immense trade on the part both of those engaged in the mills and works, and of those responsible for financing the innumerable transactions in raw cotton, yarn and cloth, it is obvious that the trade as a whole must have had at its disposal the services of an extremely able and energetic body of men. In these days it is not unusual for these men to be adversely criticised; but many of the criticisms are somewhat unreasonable, since what they really amount to is that the industrial and commercial structure, devised in the course of generations in connection with a great industry, was well adapted for the conditions which existed before 1914, but is not so well adapted for the conditions which arose after 1918. As we have seen, the growth of the industry had for many years been associated with a parallel development of textile education, which was quite suitable for the circumstances of the time and had a very great influence on the industrial methods employed.

If conditions external to the industry had remained unaltered, there would have been little reason for any special consideration of the question of recruitment and training for its personnel; in view of the past history of the industry, it seems likely that, as the need for modification of its methods of staffing became clear, this modification, which had already begun, would have been brought about—possibly rather slowly, but yet so quickly as to cause little inconvenience. The circumstances of the industry have, however, altered greatly and very swiftly. Countries which were once good customers of ours are developing their own resources and manufacturing cotton goods for themselves; others, faced with the need for providing employment

for their populations, are competing strongly with us in markets where we used to sell on a very large scale. The English cotton trade is thus confronted with a competition in overseas markets which is far more formidable than it was a few years ago ; and this demands that it shall employ every available means for increasing its efficiency.

On the other side, our national system of education has been so developed that the old system of recruitment for the industry must be radically altered if the trade is to maintain even its present position in the markets of the world. While the conditions of many industries, including the cotton industry, have been changing, so also has the educational structure. The two sets of changes have proceeded side by side, with little contact between them ; the industrialists have gone their own way, and so have the educational administrators, each party so immersed in its own affairs as not to have found time to communicate at all fully with the other.

Recent Developments in the Educational System

Thirty years ago, when the Education Act of 1902 was only beginning to be put into operation, nearly every industry looked to the elementary school, and to this alone, for practically the whole of its recruits ; and necessarily so, since the secondary school system, with which we are now so familiar, had not yet been developed. In the last generation, however, we have seen great changes. The age at which children become free from the obligation to attend school has been raised generally from 13 to 14 ; the half-time system, formerly so prevalent in the textile districts of Lancashire and Yorkshire, has been abolished ; central elementary schools, with a leaving age of about 15, have been set up ; junior technical schools, which prepare boys and girls for careers in industry and commerce, have been started in many places ; the evening technical schools have become organised institutions ; and, finally, secondary schools, with a leaving age of 16–18, have been established in such numbers as to bring secondary education within reach of practically every boy and girl with the ability necessary to profit by it. The result of all these changes is the addition of about a year to the normal length of the school life of the child who remains in the elementary school, and of two, three or more years to that of the school life of the children who are transferred to other types of school.

Clearly, therefore, the industries of the country have a potential supply of recruits who are far better educated than were their predecessors a generation ago ; and it might be supposed that they are already deriving considerable advantages from this circumstance. But here it is necessary to take into account another important factor, the further reorganisation of the national system of education into primary or " junior " schools and a variety of post-primary schools falling into three main categories : the senior schools, with an age-range of 11–14, the central schools, with an age-range of 11–15, and the secondary schools, with an age-range of 11–16 or 18. To these types of school must be added the small number of junior technical

schools recruited from the senior or central schools at the age of 13 or 14 years.

Let us consider how this new system affects industrial recruitment. In former times, as we have seen, the elementary school was an undifferentiated institution, which contained children of all grades of ability, from the lowest to the highest. Industry, drawing from it workers of nearly every grade, was assured that it would normally have a proper supply of able and keen youngsters who would ultimately separate themselves from the main stream of recruits and fill the more responsible posts. On the whole, this system of recruitment was as satisfactory as the circumstances of the time permitted. It is, however, no longer satisfactory, since the reservoir constituted by the ordinary senior elementary school does not contain the same elements as before, the majority of the boys and girls of exceptional ability having been already drawn from it, either to the secondary or to the selective central schools. If the nation is to reap all the available benefit from the immense improvements in our educational system—and incidentally to obtain an adequate return for the increased expenditure on education—it will be necessary for industry to review and amend its system of recruitment so as to be sure of attracting and retaining a suitable proportion of young people who, after being selected by reason of their exceptional qualities for prolonged education at the public cost, have completed the courses of instruction in secondary, central and other schools with a high leaving age. Necessarily, industry must continue to draw upon the elementary school for the great majority of its workers ; but, in the general interest, it is important that it should make provision for recruiting the bulk of its more responsible officials from the schools which give a prolonged training to specially selected persons.

III. Research in the Cotton Industry

It became evident during the war that British industry generally ought to make far more use of scientific knowledge in the future than it had made in the past. The cotton industry, in particular, realised that the most strenuous efforts would be needed to regain that command of the markets for its goods which Lancashire had so long exercised, but which, owing to the restriction of shipping, the shortage of men and the general economic disturbance, it had lost during the continuance of the war.

The Research Association Movement

The Government had decided at an early stage of the war to encourage industries to conduct scientific research on their problems for themselves, and the cotton industry was one of the first to begin to plan the establishment of a Research Association constituted in accordance with the general scheme contemplated by the Department of Scientific and Industrial Research.

The original intention of the Government was to grant subsidies to Research Associations for a period of five years only, and not to continue financial assistance to them for an indefinite period.[1] The post-war years have, however, been so lean that few industries are in a position to continue the working of a Research Association on a sufficiently large scale without some government aid, and hitherto the cotton industry has been no exception to this general rule.

The Provisional Committee for the Cotton Industry

The first step taken by the industry was the setting up of a Provisional Committee, representative of its various branches, to frame a coherent scheme, both of research and education for the cotton industry. Looking at the whole field of necessary investigation, it decided that a research station was needed in which physicists, chemists, engineers, biologists and textile experts could carry on their work under favourable conditions. Their preliminary survey made it clear that textile research must begin with a careful examination of the nature and properties of the raw material, about which comparatively little was known. In other words, the physicist, the chemist and the biologist had to start work before the engineer and the textile expert; and further, there is no doubt they will always have to be associated with the latter, no matter how "practical" the investigations become.

Foundation of the Shirley Institute

The Research Association came into existence in 1918 and the Research Station was completed and a staff of workers engaged at the Shirley Institute in 1920. The Research Association has been extremely fortunate in its choice of Directors. The first stage of the work was done under the guidance of the first Director, the late Dr. A. W. Crossley, F.R.S. It was his task to create a serviceable instrument for the initiation and conduct of scientific investigation over a wide field; his successor, Dr. R. H. Pickard, F.R.S., is making the most effective use of that instrument for the good of the industry.

For the reasons given above, the industry could not expect to receive for some time results of great practical importance. Patience was necessary, and is now being rewarded.

The Joint Standing Committee on Education

In regard to education the promoters of the Research Association realised that scientific investigation and scientific knowledge are of little use to an uneducated industry, which can neither see their utility nor appreciate their bearing on mill and works practice. At the very beginning of its work, therefore, the Association formed an

[1] The late Prof. Marshall expressed the opinion, however, that Research Associations should continue to receive grants from the State, even when they were on a permanent footing. (*Industry and Trade*, page 101.)

Education Committee, charged with the duty of considering whether the existing provision of education was adequate and suitable for the school training of the personnel of all grades in the industry; and if not, in what ways it could be improved. The result of the deliberations of this Committee was the establishment of a "Joint Standing Committee on Education for the Cotton Industry," which includes representatives of all branches of the industry—employers and employed—and of the education authorities specially concerned with textile education. Although this Committee has been in existence for some years, it cannot be regarded as having made any very notable contributions to the solution of its particular problem, except as regards the means of training designers for the industry. Its work on this aspect of textile education has been valuable, one of its consequences having been the holding of an interesting exhibition of textile fabrics about three years ago at the Manchester School of Art.

The Trained Staff required for Co-operative Research

The problem is, however, urgent. The industry must have the services of men competent to undertake and carry out two tasks which, although separate, have much in common:

(*a*) to examine from the point of view of its practical utility every fresh piece of knowledge gained by the Shirley Institute, to determine whether it is applicable, either immediately or later, to the practice of the firm by which they are employed—whether its application will result in profit to the firm or benefit to those employed by it, what modifications of existing practice this will involve, and how, if applied, this can be done most speedily and effectively;

(*b*) to watch continuously present practice in the industry and decide which problems ought to be solved by the staff of the mill itself and which ought to be referred to the Shirley Institute, either because of their difficulty or because of their general interest either to the industry or to important sections of it.

The Research Station and the mill or works are, in fact, from the point of view of scientific investigation, two complementary institutions, each in close and organic touch with the other, receiving knowledge from it and contributing knowledge to it.

Liaison Officers or Scientifically Trained Managers?

Although it is clear that a scheme of co-operative research demands for its success the existence of men able to carry out this double duty, it is not so clear where and how these men should be employed. Ought they to form part of the research organisation? Or should they constitute part of the mill organisation? At first sight, there may appear to be little difference between the two plans, but the adoption of the first implies, in fact, the intrusion

of a group of liaison officers between the Research Association and the mills. The second implies that the responsible industrial officials are competent to understand, appreciate and apply with skill and judgment the new scientific knowledge nearly as quickly as it is obtained.

Of the relative efficiency of these two plans, assuming that men of suitable abilities and training are available, there can therefore be little doubt. If such men are available, the adoption of the first plan might tend to perpetuate the isolation of the industry from its research organisation and cause this to be regarded as something aloof and external to itself; while the adoption of the second would tend towards the permeation of the whole industry with scientific knowledge and the scientific spirit, a gain of incalculable value. But unfortunately, as things are, the only course possible is to attach to the Shirley Institute a staff of suitable qualifications and experience, who can act as liaison officers between it and the works and mills.

The Need for a New System of Training

This choice of the second-best plan is significant. The earlier part of this paper will have made it clear that the methods of recruitment, training and promotion, as well as the methods of textile education, were devised for conditions altogether different from those which now exist. The present conditions have led the industry to a conviction of the need for calling into being a great co-operative organisation for research; it has acted promptly and energetically on that conviction. A far more difficult task is now before it—that of reforming its methods of recruitment and training for the men who will have the responsibility of reaping, and utilising to the full, the fruits of the work of the Research Association it has established.

It is not that the new conditions demand the introduction of fresh grades of workers. All the necessary grades are there—research workers, managers, overlookers and operatives. But in view of the changes in the attainments of the personnel which modern conditions impose, a reconsideration of the methods of staffing, at any rate, the higher posts in the industry is urgently needed.

IV. Recruitment of Different Groups of Workers

We can now turn to the question of the recruitment and training of the different groups of workers in the cotton industry.

The Research Worker

A visit to the Research Station makes it immediately obvious that the majority of those employed there are not primarily textile experts; it would be a misfortune if they were. They are mainly men who have acquired—often at a university—a wide and thorough knowledge of a particular branch of pure science and know

something of other cognate branches. Usually they are physicists, chemists, biologists, mathematicians or engineers first of all; but they are applying their energies and their knowledge of pure science to the solution of the particular set of problems presented by the cotton industry. Necessarily, a proportion of the staff are experts on the practice of the industry, but, although they are essential members of the staff, they are a very small proportion of the total number engaged.

What applies to the staffing of a great co-operative research station applies also to the staffing of the research laboratory of a single firm; not, however, with quite the same force, since the scientific staff of the latter cannot be expected to do much work of a fundamental character, their function being rather to translate the general results obtained by the co-operative organisation into the concrete and individual practice of the firm, which may be engaged in a somewhat narrow range of industrial production.

The University

Recruitment for a research organisation, whether co-operative or individual, should usually therefore be from men educated in educational institutions on the university plane; wherever they have been educated, they should, as a rule, have had a good training in pure science as a foundation, though they will be all the better fitted for their future work if they have superimposed on this some post-graduate study of textile problems and have received a training in the methods of scientific investigation.

Managers and Departmental Heads

Since research workers constitute a new class of official in the cotton industry, no difficulty arises in their appointment through the existence of vested interests and traditional methods. As soon, however, as any proposal is made for recruiting managers in a different way, bringing in mainly men with a good preliminary education, in which a good deal of attention has been devoted to science, difficulties are bound to arise. It is not easy to modify customs which are nearly a century old. If the industry is to follow the path it has already entered, these difficulties must, however, be faced and overcome. For what are the facts? The cotton industry, confronted with a competition more fierce than it has ever experienced or even thought possible, is bound to make every one of its mills and works as efficient as possible through the inclusion in its practice of all the new knowledge which is both available and applicable; unless it does this, its state will go from bad to worse. The new knowledge which is being produced can only be applied effectively by men who understand it, see its bearing on everyday practice and apply it with sound judgment; and these men must be inside the mills, watching, superintending and controlling their work, modifying the methods as needed, and feeding the

Research Association both with criticisms of what it has already accomplished and with suggestions for the further advancement of industrial knowledge. The manager of the future must, in fact, have a scientific training, which has included the study of such subjects as physics, mathematics and mechanics at least, although it might with advantage include other subjects, such as chemistry. But he should have had prolonged industrial experience as well. He is not dealing with a raw material whose composition is constant and whose properties are well known, as is the engineer when dealing with steel and other metals. He is carrying out a series of operations on a raw material whose characteristics are inconstant and whose behaviour is variable ; and, for this reason, he must have handled and examined this material at each of the operations through which it passes—and this not casually or only occasionally, but carefully and very frequently over a long period.

Secondary Education and Technical Day Classes

He should, indeed, have received a training in which practical experience in the mill and theoretical instruction in the school have gone on simultaneously, practice illustrating theory and theory explaining practice ; but both practical experience and theoretical instruction should have been preceded by what is often called a " good general education " in which proper attention has been devoted to science.

These considerations point to the desirability of the future manager being recruited in general from schools with a high leaving age, that is, from secondary, central or junior technical schools, all of which give a firm foundation on which to build ; and to his receiving a further training in which practical work in the mill and theoretical studies in the school proceed side by side. The theoretical studies should, however, not be followed in the evening, when the youth is worn out by many hours' work in a hot and damp atmosphere, but in the day-time, while he is fresh and full of energy.

Promotion from the Overlooker Grade

There is another factor of great importance. The present managerial staff is recruited in part, at any rate, from the class of overlookers, who constitute a pool from which selection can be made ; and selection is necessary, even when this pool is composed of men with suitable knowledge, since certain personal qualities must be possessed by the managers of large undertakings. They must have organising ability to plan its work, courage to take important decisions, and tact and sympathy in the exercise of authority over others.

It is therefore advisable either that the industry shall adopt more generally the policy of appointing assistant managers from amongst whom selection can be made for posts as managers ; or that it shall take what measures are needed for securing better qualifications

amongst the overlookers—qualifications comparable with those needed for management.

The Overlookers

The work of a central co-operative research organisation, if properly utilised, must inevitably influence works practice more and more. There may be in some instances greater simplification of processes, while in others there may be increased complexity. In either case, it seems certain that the industry will be impelled, for other and quite different reasons, towards the production of finer and better goods, where more skill and work are put into the same weights of material. Powerful influences—coming, as they do, from both the scientific and the economic sides—will tend towards greater precision in the various operations, and obviously to a demand for greater knowledge and skill amongst those immediately responsible for their oversight.

The possibility of considerable modifications of the mechanical means of production, with which the overlooker is much concerned, was foreseen by the Provisional Committee on Research and Education for the Cotton Industry. Writing in 1917, they said :

> " In the last fifty years there has been only one invention of importance —Northrop's automatic loom. Except the Jacquard machine and the Heilmann comber, all the epoch-making mechanical discoveries and improvements of textile machinery have been made by Englishmen. But since 1850, or thereabouts, no one except Northrop, either Englishman or foreigner, has made any mechanical improvement of first-rate importance. How can we escape the conclusion that, on its mechanical side, at any rate, the cotton industry of Lancashire is the mere son of its father, living on his intellectual energy, not on its own, and drawing the dividends where he invested ? "

It is to be noted that these views were not those of persons outside the industry, but of men holding high positions within it. The industry had, in fact, almost stabilised its mechanical plant ; and this is probably one reason why it has been so long contented with the methods of training its officials of various grades.

Trade Union Rules

It is remarkable that the Rules of some of the Trade Unions make no reference to the training of the overlookers received into membership.

In other Trade Unions, however, the Rules make references to training : for example,

> " In order to protect the interests of the members of this Society, no member shall, on any pretext, or under any circumstance, teach any person the trade of a power-loom overlooker, without having first received the consent of the ordinary Committee."
>
> " Should any person wish to learn the art of power-loom overlooking, he must apply to the Committee through the medium of the man with whom he intends to learn, and should it be proved to their satisfaction

that the teaching of such person will not in any way injure another workman, he shall be allowed to learn on paying the sum of £2 to the Association."

"The Committee may also grant permission to any member of our Association to teach his son the art of power-loom overlooking, but only one son at a time."

With the change in the qualifications needed by overlookers which seems not improbable, the methods of selecting and training these officials calls at least for review, if not indeed for reorganisation.

The Junior Technical School

There exists in the Junior Technical School, of which a fair number have been established in Lancashire, an excellent means of giving to boys between the ages of 13 and 15 a sound training in the fundamental subjects of mathematics, mechanics, machine drawing and elementary science. These schools have been most successful in preparing boys for skilled employment in building and engineering, and enjoy quite deservedly a high reputation for the quality of their pupils who enter these constructive industries. Very few boys enter the cotton industry from them, the reason being that recruitment for posts as overlookers in this industry was based years ago on the assumption—sound enough at the time—that the overlooker must have spent a long period as a machine minder and have reached the age of about 20 before he entered upon his period of special training, that is, in those instances where special training was regarded as necessary. In these days, when schools giving a more complete education preparatory to certain kinds of employment are available, it will be a misfortune for the industry if it does not organise its methods of selection and recruitment so as to take full advantage of this development of the educational system and accept apprentices to overlooking from suitable schools at the age of 15 or 16. It is quite true that this involves a change in the whole outlook towards recruitment and promotion of those in the industry, and that this could not be made without considerable friction and misunderstanding. But if the industry is to flourish, or even to be continued on a large scale, it must have the services in every grade of men of suitable training. It must, in fact, be prepared to modernise not only its machinery and its processes, but also its methods of staffing.

The Operative Workers

Little need be said about this group of workers, even though they are by far the most numerous class. All that the school can properly do is to give them the best possible general training, in which attention is devoted to imparting both alertness of mind and deftness of hand. It is in the mill itself, under the guidance of more experienced workers, that they must learn to apply these qualities of mind and hand to the tasks before them.

V. Conclusion

Undoubtedly, some suggestions made in this paper are likely to be regarded as unpractical, or revolutionary, or as tending to deprive young men of the few opportunities of promotion which are at present open to them. Nevertheless, it is believed that they are worthy of careful consideration. As regards their impracticability, the men of this generation in the industry ought to be prepared to confront with confidence difficulties which are no greater than those which their predecessors faced, and faced successfully. Lancashire built up during the nineteenth century an industrial structure which compels the admiration of every one who is well acquainted with it. Obviously, this great and complex task was not accomplished without the leaders of the industry meeting continuously with problems which seemed at first sight to be quite insoluble; but the great majority of these problems were found to be capable of solution when intelligence and persistence were applied to them. The difficulty arising from the necessity of modifying the methods of recruitment and promotion cannot be greater than many of the difficulties that arose in previous generations. What is needed, then, is the application to it of the same courage, good-will and intelligence which served so well earlier generations engaged in the same industry.

That the proposals appear revolutionary is not a real objection to them. These times are very different from those of the past. An entirely new set of circumstances has arisen; and the cotton industry must either adapt itself to these circumstances or diminish in efficiency until it has lost its outstanding position in England. No one can regard a prospect such as this with equanimity, or reject without careful and impartial examination any proposals for maintaining the effectiveness of the personnel of this great trade, and through this the standard of life of the millions of people directly or indirectly dependent on its welfare.

Finally, as regards the notion that young people of great ability will be deprived of opportunities for promotion, it should be said at once that such a notion would be based on a misunderstanding of the facts. We have reorganised our national system of education almost completely during the last generation. A boy of outstanding ability has a better chance in these days than at any previous time in our educational history of receiving a good education, prolonged to an age beyond 14: and this is quite independent of the social stratum from which he comes. The reorganisation by the cotton industry of its methods of recruitment, training and promotion on the lines suggested in this paper would not result in its higher officials coming from a different class of the community: they would come from the same class as now, but their path would be smoother and more direct. The benefits to the industry—and thus to the community—would, it is believed, be incalculable.

A. ABBOTT.

CHAPTER SIX

Concluding Note: An Empire Centre for the Study of Education

A RASH attempt has been made in this Section to bring together some ideas about the future of education. Its chapters have been written independently of other chapters appearing in other Sections of this volume on the educational problems of other English-speaking nations; but the reader can hardly fail to remark some unstudied coincidences of thought and fact in these chapters.

In the sphere of school education, it will be observed that Australia, New Zealand and Canada are all increasingly concerned with the idea of eliminating the thorny hedges of examinations and grades which at present cut up the field of elementary and secondary education, so that the pupil is restricted to narrow footpaths punctuated by a uniform series of stiles. Australia has apparently got so far as practically to eliminate all examinations in some schools, right up to the threshold of matriculation. The United States is moving in the same direction. There is, in fact, a real possibility that the English-speaking nations may be working out a new answer to the idea of the " common school " up to 15, an answer which will reconcile coherence of elementary, secondary and technical school organisation both with the cherished English tradition of the school as a corporate society with an individuality of its own and also with a far greater variety of curriculum and of school types than (as may be discerned in the chapter on Austria later in this volume) has, perhaps, been contemplated by continental exponents of that idea.

And this re-planning of the school system is evidently intimately connected with a realisation that the old social order is changing in a far more fundamental sense than that in which the socialist or communist has usually anticipated such a change. It is a change, not of organisation, but of organism; a change, not in the way in which society must be administered, but a change in the kind of life which the individual members of society will lead. The chapters in previous Sections could not, indeed, within their scope, discuss these determining social considerations which lie behind the development of educational policy. Possibly, too, movements arising out of the world-wide chaos of unemployment have taken on an educational character in England rather sooner than in other English-speaking countries. Perhaps, through longer, though by no means more intense, experience of the unemployment problem, we have come to realise more naturally than they its bearing on the schools. Possibly, therefore, we are in a better

position than they to set the re-planning of the schools in its true relation to the far wider and more clamourous demands for the benefits and consolations of education which come from the unemployed juvenile and the unemployed adult.

However that may be, surely the time is coming when the countries of the British Empire, at any rate, need to pool their ideas and consider their future policy. It may be a dream, but it is at least significant that London, which those nations are not ashamed to regard as the centre of the British Commonwealth, has at last provided itself with a University Institute of Education which can have no ambition to substitute itself for University Departments of Education and institutions for the training of teachers either in the Dominions or in Great Britain itself, but can, perhaps, legitimately aspire to be a centre of research and a focus for the culture of that Commonwealth. For that culture has at once a peculiarity and a unity of which foreign observers are very conscious, and which has, one thinks, emerged at least dimly in the pages of this YEAR BOOK during the last three years. If it " drives at practice " rather than at a philosophical rationalisation of itself, that surely fits it the better to adapt itself to the changes that are coming on society. If its incoherence and inarticulateness in the past have been largely due to a constant effort to meet new conditions without sacrificing old standards, that again fits it the better to understand new tendencies, which are, perhaps, in their essence a reaction from nineteenth-century ideas and conditions of life back towards the standards of a simpler civilisation. And if the British Commonwealth possesses any such secret, it can make no greater contribution to a troubled world than to realise it and to use it.

E. P.

The Selection and Supply of Textbooks in the British Empire

Introduction

IN 1928 the Consultative Committee published its report on *Books in Public Elementary Schools*. The report is a typical example of the thoroughness of all work undertaken by this committee, and it is not the intention of this survey to cover the same ground in detail. But there are important aspects of the textbook problem which may have been considered to be outside the committee's terms of reference.

Prescribed Textbooks

The first of these is the method by which textbooks are produced in this country. In the absence of official books the production has been left entirely in the hands of individual publishers. Before discussing the details of this arrangement, it is as well to consider the alternative to "private enterprise." A number of countries issue prescribed lists of books, the publication of which is either undertaken by the State itself, or under contract with a firm of publishers. There are two motives for prescribed books, one supposedly educational and the other frankly political.

The Educationally Inspired Textbook

In dealing with the educational motive, however, it is necessary to draw a clear distinction. In Canada, for instance, education preceded an adequate supply of qualified teachers and, in order to avoid chaos and to obtain some standard of attainment, it was considered advisable to establish a uniformity of method and textbooks. Many officials attached to the Canadian system of education have expressed the hope that, in the near future, the intensive restrictions which now exist may be relaxed, since uniformity, as such, is not regarded as the Mecca of educational development. In France, on the contrary, uniformity is the ideal to which everything else is subordinated; the individuality of the teacher is deliberately suppressed. Such uniformity tends almost inevitably to stagnation, for those most priceless possessions, the individuality and enthusiasm of the teacher, are stifled. A teacher may be compelled to use a textbook with which he is completely out of sympathy, or, what is more serious, to which he is definitely antagonistic. But there is another point which is brought out

clearly in the summaries of practice in countries belonging to the British Commonwealth of Nations: once a book is prescribed, it tends to remain in use long after it is out of date. In one province of Canada, an extreme case no doubt, the prescribed list of books has not been revised since 1915, while in New Zealand, on the score of economy, a list compiled in 1929 is now extended to 1937.

The Politically Inspired Textbook

The politically inspired prescribed book stands in quite a different category. Its object is to train the child-mind in a preconceived groove so that the schools may become the servants of the State. But obviously, in an ever-changing world, there is no guarantee that any form of government will be permanent and, once the principle has been established that the schools may be used for propaganda purposes, a change of government must tend inevitably to a change of propaganda. Although the English-speaking nations have been singularly free from such practices, every now and then an agitation is started in favour of revision to meet the opinions of a certain school of thought, especially in regard to history textbooks. Pacifists would exclude all military or naval records as liable to engender a militaristic spirit, while one political section would re-write the history of the last 150 years from the point of view of the supposed existence of an intensive class war. It is useless to deny that in the past certain textbooks have shown a bias, and it is only comparatively recently that the reigns of Elizabeth and Mary have received a treatment which need give no justifiable offence to Protestant or Catholic. When, however, modern textbooks are examined impartially, an enormous change is evident. To-day, eminent authors, who at one time were content to write solely for the universities or secondary schools, are placing their scholarship at the disposal of the elementary schools. It would be a tragedy if the public elementary schools were to become the playground of politicians or religionists, and it is safe to assert that, so far as this country is concerned, no legitimate case can be made out in favour of prescribed books of any sort or description. The subject of selective lists of books will be discussed later.

Function of the Publisher

We now come to the function of the publisher, and at once a common misconception should be cleared away. It is often imagined that a publisher is merely a printer of books in the compilation of which he has taken little if any part. This impression was clearly in the mind of many members of the Consultative Committee, for not only does the publisher receive scant attention throughout the report, but in the section which discusses the setting up of an Advisory Committee on textbooks it is definitely suggested

that no representative of the publishers should be included. There may be publishers with so little knowledge of the schools that they must of necessity restrict themselves to the printing of submitted manuscripts; but these, if they exist, are so much in the minority that they need not detain us here. In actual practice, on the contrary, very few submitted manuscripts ever see the light of day. Teachers may know what they want, but the number who are capable of translating their requirements into textbooks form a welcome but insignificant minority. The evolution of a textbook rarely begins in the schools, but rather with a carefully chosen editorial staff of experts who are in touch with every phase of education. This knowledge is obtained from direct contact with the schools, constant discussion with education officials and a close study of all documents bearing upon the problem. By these careful methods each new movement in education is judged and an opinion formed as to its usefulness. Often, for instance, an ardent reformer will convert a body of teachers to his methods when other experience, unknown to them, has proved that in actual practice the suggested method does not obtain the expected result. The publisher, more fully informed, does not support the movement, and it dies a natural death. When, on the other hand, teachers arrive at conclusions which are borne out by information in the publisher's possession, he can direct his whole efforts towards supplying a proved need.

In addition to these two functions of rejecting the unsound and assisting the sound, the publisher often initiates methods which revolutionise teaching practice. To take but one example: a certain publisher who had studied reading methods abroad formed the opinion that a combination of "phonics" and "look and say" was educationally sounder than an inclusive insistence upon phonics. He produced a series of books embodying these ideas which, within a short time and in spite of intense initial opposition, changed the whole conception of reading in this country. Numerous examples of this kind could be given. The function, therefore, of the publisher is to translate known needs into reality and, where the need is there but not realised, to take his courage in both hands and supply the motive power which will convince the public of the necessity for change.

Lack of Science Textbooks

There is a distinct tendency throughout the Consultative Committee's report to emphasise a supposed lack of suitable textbooks. It is difficult to discover on what grounds this opinion was based, especially since the report was published before the new problems resulting from the reorganisation of the school system had presented themselves for solution. With the single exception of science, each subject in the elementary school curriculum is covered by many excellent series of books. With regard to science, indeed, the situation is still frankly unsatisfactory, but this is

not due to the publisher so much as to lack of agreement among teachers as to the type of science best fitted to the needs of the elementary schools. In the United States of America courses of " general science " have become very popular, but too often these courses have deteriorated into general knowledge about scientific things, with very little definite scientific background. In Great Britain we have consistently tried to avoid a smattering of everything and a definite knowledge of nothing, but in the absence of properly equipped science laboratories in elementary schools it has been impossible to treat the subject seriously in the majority of schools. Further, there is a definite clash of opinion as to the starting-point for a science course. Some people would make biology and nature study the basis, while others would divide science into the traditional chemistry and physics. There is yet another school of thought, ably represented by Mr. Whipple, Director of Education for Nottingham, who would make domestic science the chief medium of instruction. There is a considerable amount of valuable experience available, and a conference of all interested in the teaching of science in the elementary schools might usefully meet to pool their experience and, perhaps, give some sort of lead to the country as a whole. For the rest, first-class textbooks, second to none in the world, are available, and the only real problem is one of selection.

In the great majority of areas the choice of textbooks is very wisely left to the teachers. It is felt that head teachers are capable of choosing their own tools. A number of authorities, however, have Selective or Approved Lists of books. Let us take the Selective List first.

The Selective List

Here the principle is recognised (although rarely definitely admitted) that the choice of books should be taken out of the hands of the individual teacher, except in so far as he can choose one or other of a restricted number of books in a selective list. This list is usually drawn up by a sub-committee composed of officials and teachers, who meet at stated periods to consider the merits or otherwise of books published since the last meeting. There are three obvious objections to the selective list. First, any published list based upon the selection of a committee, usually meeting annually, is out-of-date almost on the day of publication. New books, however excellent, cannot be considered for introduction into the school until the next meeting of the committee. Certain authorities who favour selective lists have appreciated this point, and teachers may, on special application, requisition books which are not in the selective list. It is interesting to note that a certain publisher was compelled to keep an out-of-date edition of a book specially for an area where this was the only edition authorised, although, since its original authorisation, it had been revised several times. Secondly, members of a committee tend

to judge books from their own teaching experience. It is asking a good deal of human nature to expect a teacher who is enthusiastic for the " sentence method " to give an impartial judgment on books based upon phonics, or to view with favour Mr. Haye's phonoscript or Miss Nellie Dale's colour scheme, or for a teacher who believes in free exposition to assess the value to other teachers of a series of English books which insist upon a course of formal grammar. Thirdly, if the principle of selective lists is extended, there will be little to distinguish them from prescribed books, since the narrower the choice of books the narrower will become the sphere for experiment and individuality in the schools. Courses will be compiled to fit the few available books and we shall have arrived at the state of uniformity which, we have suggested, has had disastrous results wherever it has been introduced.

The Approved List

Of quite a different character are the Approved Lists, of which the London County Council provides one of the best examples. Here every care is taken to avoid anything in the nature of dictation to teachers or an undue restriction of their choice. The members of the committee are not judges of methods, but merely of production. They ask themselves the following type of questions : are the facts correct ? are these expressions of opinion for propaganda purposes ? are the illustrations satisfactory ? is the binding desirable ? does the type satisfy the latest requirements based on eyesight tests ? etc. In other words, a book placed on the approved list satisfies the teacher, assuming he agrees with the method, that the book is safe for use in schools. Further, as regards the London County Council and certain other areas, the committees are in permanent session, and teachers may requisition approved books within a very short time of publication. The actual choice, therefore, is left to the teacher with a minimum of restrictions. It is, however, important that those responsible for approved lists should continue to safeguard their wideness and discourage any attempts on the part of committees to act as judges of methods.

Additional Facilities for Selection

There remains the problem how to choose from a number of series. The difficulties here are more apparent than real and certainly do not justify a selective list, which is often defended on the score that it saves the time of a busy teacher. In certain areas there are excellent book-rooms which teachers may visit for the purpose of studying the latest books and, in most areas, representatives of publishers are allowed to visit schools in order to discuss their firm's books. It is objected in the report of the Consultative Committee that a persuasive representative will talk a head teacher into adopting a series of books on a mere cursory glance during a visit. Such a statement is based upon ignorance

of what actually takes place, since, following the visit of a representative, specimen copies of books which have interested a teacher are forwarded to him for further inspection. If after this he is still influenced by the supposed persuasiveness of a representative and introduces books which do not fit his needs, then it may be suggested that the method of selecting head teachers needs serious revision.

Conclusion

In conclusion it is fair to say that in no other country is there greater freedom for the teacher than in England, and, consequently, nowhere is progress based on such solid foundations. Our teachers have consistently refused to be stampeded into adopting superficially attractive new methods, but have used their freedom to develop a system with which it would be dangerous to tamper. By all means let as much advice as possible be placed at the disposal of the teacher, but if future progress is to be ensured restrictions should not be placed upon the individuality and enthusiasm of 170,000 teachers who have contributed so much to the building up of our present system of education.

I. England and Wales

The following authorities have selected or approved lists: Bath, Breconshire, Brighton, Dorsetshire, Essex, Hampshire, Heywood (Lancs), Kent, Leicestershire, Leicester, Leeds, Liverpool, London, Radnorshire, Somersetshire, Suffolk East and West, Warwickshire and Wolverhampton. In general, the selection of textbooks is entrusted to a special subcommittee of the elementary education committee, consisting of officials and teachers. Specimen copies of books submitted to the respective education offices are usually passed on to the members of the committee concerned. It is not the practice of education authorities to publish the names of members of these committees, except in the case of Liverpool (see note below). Thus canvassing of members is not allowed.

We have already noted the wide scope of the average approved list, but would reiterate here the danger of a noticeable tendency on the part of members of certain committees to act as censors of methods. Such a practice would only appear to be justifiable if it is the deliberate intention of an authority to prescribe an exact syllabus. Otherwise it is advisable to allow teachers to obtain results by methods in which they have faith and, if satisfactory results are not being obtained, to use the advisory machinery of Government and local inspectors for the suggestion of more appropriate means. The present writer remembers a teacher member of a book committee who rejected out-of-hand a series of history books because they departed from his conception of social history as the only sound approach to the subject. And this in spite of the fact that a considerable number of his colleagues wished to use the series of books in question.

There are no lists for secondary schools, the only restrictions being the "set" books for examinations.

The following notes on particular areas may be of interest.

London

All specimen books should be forwarded to the Education Officer, County Hall. There is a standing textbook committee to the members of which specimen books are forwarded for consideration. Reports from

individual members are discussed at meetings of the full committee which are held at frequent intervals, and teachers are then informed by circular what new books are sanctioned for addition to the list, which is revised annually. The annual list is a bulky document characteristic of the wide choice allowed to teachers in the London County Council area, and it is safe to say that, with very few exceptions, all books of merit are included on the list and, by the machinery of a standing committee, may be requisitioned by teachers within a short time of publication. Thus the objection to lists that they are out-of-date almost on the day of publication is obviated.

To assist teachers in the selection of suitable books there is an extensive library at the County Hall, with books arranged in the grouping and order in which they appear on the official list. Every head teacher is expected to visit this library before sending in a requisition, and time off during school hours is allowed for this purpose. Should a teacher require more time for the consideration of a series of books than is available during a visit, he can apply for copies to be sent on loan by the Stores Department. Teachers may requisition books which are not on the approved list if sufficient reason is given and accepted for such a course.

Brighton

The Brighton Education Committee have a selective list of textbooks and readers compiled by a selection committee composed of teachers. The list is revised annually. Publishers can forward specimen copies at any time, but are notified annually that the list is about to be revised and are invited to send books.

Books not in the list can be requisitioned.

Kent

The committee's catalogue of books and publications is an approved list of books and publications suitable for use in schools up to the school certificate stage. Most of the books included in the schedule are available for inspection in the Committee's Exhibits Room. Books are included which are suitable not only for class use but for library use and individual reading.

The latest edition of the committee's catalogue was issued in August 1931, and every six months a list of additions is issued.

The work of compiling the catalogue was entrusted to a committee of teachers representing all grades and types of schools. The catalogue is divided into sections according to the subject, and each subject has a panel composed of members of the committee.

The committee will receive for consideration any books submitted by publishers which the publishers consider suitable for use in schools.

In view of the nature of the list, very few books are requisitioned by teachers which are not in the list. When such a book is requisitioned it is usually considered for inclusion in the list before its supply. Certain books which are needed for special purposes are supplied although they are not included in the list.

Liverpool

The authority has an approved list of textbooks, which is compiled by a special "books consultative sub-committee" of the elementary education sub-committee. This consultative sub-committee is appointed annually to revise the current list and to examine books and apparatus which have been submitted since the last revision. Hence the "loose-leaf" form of the list. Supplementary lists are next published.

The special sub-committee consists of committee members, officers of the authority (including particularly the inspectors) and teachers, some of the latter being nominated by the committee, others by the Teachers' Associations, or by local branches of learned societies such as the Historical Society and the English Association.

Books submitted by publishers which are sent to the Director of Education are indexed in, and all such books are presented for examination by the books consultative sub-committee.

Teachers wishing to requisition books which have not been approved must satisfy the inspectors that the books are more suitable for their particular purposes than books on the committee's list.

The authority maintains a book-room, in which every book or piece of apparatus on the authorised list can be inspected by teachers. Also, and this is peculiar to Liverpool, permits are granted to accredited representatives of recognised educational publishers to visit individual members of the selection committee for the purpose of discussing books which are submitted for inclusion in the list. After the list has been revised, the authority organises a publishers' exhibition at which all books and apparatus on the list can be examined.

Somerset

An approved list of books both for scholars and teachers has been prepared. This list was drawn up by a special sub-committee consisting of selected head teachers of schools in the county and of H.M. inspectors and the committee's inspectors, etc. No time for revision has been fixed, but books submitted by publishers are retained for consideration at the appropriate time. Teachers can, however, requisition books which are not on the approved list.

II. Scotland

In theory conditions in Scotland vary very little from those in England and Wales. In actual practice, however, an apparent freedom of choice as regards textbooks is considerably restricted by the requirements of examinations. Teachers are compelled to view books with the examinations always in mind, and although one book may contain a desirable breadth of vision, another must be chosen if it is likely to ensure more certain examination successes. It is not within the province of this survey to discuss at length the examination system of Scotland, but it may be useful to point out that the system built up by Mr. Percival Sharpe, when Director of Education in Sheffield, has much in common with it. The aim of both systems is to obtain a definite standard of attainment in a few selected subjects rather than a mere smattering of knowledge acquired by a wider curriculum. Books favoured in Scotland, therefore, tend to be of the " many examples " character, so that constant practice on any arithmetical or grammatical rule will produce complete accuracy. The compositions of Scottish children are accurate but seldom inspired, while those of English children are " free " but equally seldom accurate with regard to grammar, spelling and punctuation.

Within the limits of expediency outlined above, teachers in Scotland have freedom of choice in textbooks, although there are approved lists in the areas listed below, with, in each case, the right of the teacher to apply for the sanction of books not on the approved lists.

Authorities having approved lists are as follows: Aberdeen (Borough), Isle of Bute, Dundee, Fifeshire, Orkney, Perthshire, Shetland and Wigtownshire.

In each case, specimen copies of books should be sent to the Director of Education for the respective authority.

III. Northern Ireland

The choice of books in public elementary schools is, as a rule, left to the discretion of the managers and teachers, subject to the approval of the inspectors, and to the general principle that no book may be used in any school for the purpose of secular instruction to which a reasonable objection might be entertained on religious or political grounds. But an official list of textbooks is published by the Ministry (it is revised at

intervals) for the use of pupils in studying reading, history, citizenship, economics and the Irish language, and no books in these subjects may be used other than those on the official list.

This official list is prepared in the Ministry of Education. Publishers may submit books in the subjects mentioned annually so as to reach the Ministry not later than the 31st January in each year. The books are examined by the Chief Inspector of Elementary Schools with assistance, if necessary, from other members of the inspection staff and the list is prepared on his recommendation.

In the great majority of schools the managers leave the selection of books in the hands of the teachers. In some voluntary schools, e.g. schools under Roman Catholic managers in the diocese of Down and Connor, a further selection from the books on the official list is made by a committee consisting of clergymen and head teachers. Some of the education authorities also prepare approved lists from the official list for use in schools under their management.

In secondary schools the selection of the books is in the hands of the teachers, but the Ministry reserves to itself the right to prohibit the use of such books as may not meet with its approval. Such prohibition is very rarely exercised.

IV. Canada

Alberta

Whereas uniform textbooks are used in both elementary and secondary schools throughout the province, very considerable latitude is allowed in the selection of supplementary books in all subjects. The required list is authorised by the Executive Council on the recommendation of the Minister of Education. The Department maintains standing committees in each of the subjects of the curriculum, chosen from amongst the teachers, supervisory officers and its own officials. These committees carry on continuously and make recommendations to the Department when in their opinion changes should be made. There are very few private schools in the province (about 30 in all). These are at liberty to use the texts best suited to their needs. As a matter of actual practice, they use the authorised texts, since many of their pupils go back into the publicly controlled system each year.

There is no book selection committee having jurisdiction over the entire curriculum. The Supervisor of Schools is *ex officio* chairman of all the standing committees referred to above. All committees clear through him, and he in turn transmits their recommendations to the Deputy Minister and Minister.

Books intended for examination by any one of these committees should be sent by the publisher to the Supervisor of Schools, Department of Education, Edmonton, Alberta, with a covering letter outlining the field for which they are intended and if possible the books which the sample might replace. From ten to a dozen copies of each text should be sent in the case of all books intended to go before a committee.

No non-official authority such as the University has any powers to prescribe textbooks.

British Columbia

All textbooks used in elementary and secondary schools receiving Government aid must be prescribed by the Council of Public Instruction (i.e. the Minister of Education and the other members of the Executive Council).

Teachers are free to select from the prescribed list for use in their schools the textbooks they require.

Lists of prescribed textbooks are published in the authorised programmes of study for elementary and secondary schools. The Superintendent of Education, who is *ex officio* Secretary of the Council of Public Instruction,

appoints, when necessary, a committee of inspectors of schools—or of outstanding teachers to examine and report upon the suitability of a new textbook for entry on the prescribed list. Publishers who wish textbooks examined with a view to having them prescribed for use in the elementary or secondary schools should submit at least two copies of each to the Superintendent of Education, Victoria, B.C.

There are no textbooks prescribed by non-official authorities for use in preparation for the Matriculation Examinations.

Manitoba

All textbooks are authorised by the Advisory Board of Education, a Board created under the provisions of the Education Department Act. The elementary school teachers have two representatives on this Board, the secondary school teachers one, the school inspection staff one and the school trustees of the province two. In addition, there are six members appointed by the Lieutenant-Governor in Council, and the Registrar of the Department and Deputy Minister of Education are members *ex officio*.

The teachers must use the books authorised by the Advisory Board. In the case of the elementary schools annual lists of books for supplementary reading, etc., are submitted and the teachers select books to the value of ten dollars from this list for the school library. In the secondary schools the teachers make their own selection of reference material for the library.

Whenever the Advisory Board is considering changing any textbook, various publishers are informed, and, if they are interested, they forward to the Department sufficient copies of their book for distribution among the members of the Board. In addition, they usually furnish further copies for distribution among the members of any special committee which may be set up to advise the Board. The Board always consults with leading teachers in the subject under consideration and gets the best advice possible from the teaching profession in this way.

There are no books which are prescribed for the schools by non-official authorities.

Nova Scotia

A list of authorised textbooks is prescribed by the Council of Public Instruction, and no pupil may be compelled to purchase a textbook which is not on the prescribed list. The Council of Public Instruction comprises the members of the Government of the Province.

Local school boards are free to select books for school libraries, and may purchase books or sets of books to be used as supplementary reading material by the pupils. These books, however, may not be used to replace the prescribed texts.

A committee on the curriculum has been at work for two years and has recently submitted its suggestions for the revision of the curriculum to the Council. Among other things, this committee has considered the books to be prescribed by the Council. Committees of this type are appointed from time to time and do not hold meetings at fixed sessions. Books for the committee's examination are submitted through the secretary, who is a permanent official of the Department of Education.

The Department of Education hopes, in the immediate future, to introduce some option in the choice of textbooks. If this is done, the books will either be limited to those appearing on an approved list or will be subject to approval by the Council.

There are no books prescribed, either in fact or in effect, by non-official authorities. The universities accept the curriculum and textbooks prescribed for secondary schools by the Council.

Prince Edward Island

An approved list of books is drawn up by the Board of Education acting upon the advice of the Superintendent of Education, the Principal of the

Prince of Wales College and experienced teachers. There is no selective committee other than this, and no non-official authorities may issue prescribed lists.

Quebec

The division of the school system into two separate administrations for Roman Catholic and Protestant schools respectively has created a special problem in Quebec. There are two distinct textbook committees each entirely independent of the other.

The Catholic Committee

The Catholic Committee meets three times a year in the months of September, February and May, and all persons who wish to submit a work for the approval of this committee must send a copy, either printed or typewritten, to reach each member of the committee (at present thirty-eight copies) at least a month before the session at which they hope to receive a judgment on it. They must also send six copies to the Superintendent of Public Instruction, Quebec, stating at the same time the price per copy, the price per dozen and the course for which the book is intended. The publisher of an approved book should obtain from the Superintendent a certificate attesting that it has been approved. The Committee can at its own discretion withdraw its approval of any book that it has previously accepted. Henceforth copies of approved works must bear the date at which they were approved and the name of the course for which they are intended. Failure to observe this regulation will be sufficient cause to withdraw approval. The name of the publisher and the price of each volume must also appear on the title page, and a book may contain no advertisements without the written consent of the Superintendent. The approval of the Catholic Committee is necessary if the text, typography, paper or binding of an approved book is to be modified. All books must be printed in type sufficiently large with space between lines, and all engravings on good-quality paper.

The Protestant Committee

The Protestant Committee meets in September, November, February and May. Persons desiring to submit a textbook to this committee for authorisation should forward copies to the Director of Protestant Education (the English deputy chief of the Department of Public Instruction), Quebec, stating the price to the trade and the retail price. He will advise the number of copies required and pass them to the Protestant Committee members who constitute the sub-committee on textbooks. The Protestant Committee, unlike the Catholic Committee, will not consider works still in manuscript. Before final authorisation of any book the publisher must legally bind himself to supply said book, in harmony with price and quality of samples submitted, in the quantities that may be needed for Protestant schools for such terms of years as may be agreed upon. A sample copy of every edition of every book as authorised must be deposited in the Department at Quebec, and a certificate of approval received from the Department. Every authorised book shall bear the imprint of the publisher, and shall show on the title page or cover the authorised retail price. No part of the book may be used for advertising without written consent of the Department. No alterations in contents, typography, binding, paper, or any other material aspect shall in any case be made without the approval of the Protestant Committee. Books recommended as aids to teachers may not be used as textbooks by the pupils.

The universities have full control over the textbooks prescribed for the matriculation examination conducted by the university. These textbooks and examinations are entirely apart from those conducted by the Department of Education for pupils preparing for High School Leaving Examinations. Some officers of the universities are also members of the Protestant Committee.

Ontario

The authorised textbooks are revised and modified from time to time, as occasion requires, by the General Editor of Textbooks, a permanent official of the Department, who confers with committees of teachers specially selected for their knowledge of the subject under consideration. The prices of textbooks are kept down by competition among publishers, and, wherever the book is controlled by the Department, the printing and publishing of the book is awarded to the lowest tenderer, after tenders have been invited by public advertisement. Only one textbook is authorised in each subject.

The cost of textbooks for secondary schools is likewise lower than elsewhere, but, where the most suitable book is the joint property of author and publisher and the public competition is impossible, a special agreement respecting price is made. A contract for a term of years is made with the publisher for each book, and undertakings entered into affecting quality of paper, binding, adequate supplies, etc. In the Upper School division of secondary schools (the fifth year of the course) any books may be used which have been recommended by the principal and approved by the Board of School Trustees.

In the case of vocational schools, which are classified under secondary education, the variety of the courses of study, and the technical nature of these courses, entail greater flexibility in the choice of textbooks. In the case of these schools, therefore, lists of approved books at prices satisfactory to the Department are issued from the office of the Director of Vocational Education, and teachers may choose from these lists the texts they wish to use in their classes. Other suitable texts may be substituted with the approval of the Minister of Education, but such substitution will not be permitted unless the prices are satisfactory.

Lists of books suitable for supplementary reading and for reference use are issued by the Minister as follows :

(1) A catalogue of books for use in the libraries of high schools, continuation schools, and vocational schools.

(2) A graded list of supplementary reading books prepared for use in elementary schools.

(3) Lists of books for use in the libraries of elementary schools.

The two former are prepared in the office of the General Editor of Textbooks, and the latter in the office of the Chief Inspector of Public and Separate Schools (elementary).

There is no permanent book selection committee. Any such committees are appointed temporarily, and work in conjunction with the General Editor of Textbooks.

No books are prescribed by non-official authorities. Candidates for matriculation into the universities use the textbooks authorised by the Minister of Education for the required subjects.

A Matriculation Board prescribes the standard texts to be read for examination in the languages. This Board is composed of representatives from the Department of Education and from the various universities, but the texts chosen must be approved by the Minister of Education.

Saskatchewan

Textbooks for pupil use in all schools organised under the School Act, the Secondary Education Act and the Vocational Education Act are prescribed by the Department of Education.

The selection of suitable textbooks is made in the Department under the direction of the Commisioner of Education, who usually consults teachers and officials in this connection. Recommendation for authorisation is submitted to the Educational Council (which consists of five members appointed by the Lieutenant-Governor in Council) usually once a year. Having received approval by the Educational Council, final authorisation is

made by the Minister of Education with the approval of the Lieutenant-Governor in Council.

Publishing houses or authors wishing to have books considered for authorisation should submit copies to the Department of Education.

There are no books prescribed for schools by non-official authorities. Textbooks for students desiring to matriculate into the University of Saskatchewan are prescribed by the Department as indicated above. While matriculation courses are prescribed by the university authorities no difficulties have arisen in harmonising these with the prescribed courses of the Department of Education in the same subjects.

Textbooks for use in the Provincial Normal Schools and the School for the Deaf which are under the jurisdiction of the Department of Education are subject to approval and authorisation in the same manner as other school texts.

Library books and equipment such as charts, maps, etc., for all schools mentioned above are subject to the same regulations with regard to authorisation, but the regulations have not been so rigidly enforced, reasonable latitude having been permitted to school authorities in this connection. From time to time the Department issues lists of library and reference books which have been approved for use in schools.

V. Australia

New South Wales

Teachers in primary schools have free choice in selecting textbooks. An approved list is published, but no objection is made to other textbooks unless certain defects have been specially noted.

Books in secondary schools are approved by a Board of Examiners. An approved list is published, but no attempt is made to limit the books to be used. The approved list is drawn up by the Board of Examiners, a body constituted by the Government. This Board contains representatives of the University and of the Department of Education. The personnel is as follows:

G. R. Thomas, B.A., Under-Secretary and Director of Education (Chairman).
A. W. Hicks, M.A., Assistant Under-Secretary of Education.
B. C. Harkness, M.A., Chief Inspector of Schools.
Prof. A. Mackie, M. A., Principal, Sydney Teachers' College,

and the following members of the University Professorial Staff:

Prof. F. A. Todd, B.A., Ph.D.
Prof. H. S. Carslaw, M.A., Sc.D., F.R.S.B.
Prof. O. U. Von Willer, B.Sc.
Prof. E. R. Holme, M.A.

There is no Book Selection Committee other than the body mentioned above. In connection with books used in Teachers' Colleges, the books are selected by the principal and his staff, but if any particular book recommended is one written by a member of the college staff, an impartial committee is appointed to express an opinion regarding it.

Meetings of the Board of Examiners are held from time to time as required. Books desired to be placed before the Board should be addressed to the Under-Secretary and Director of Education, Department of Education, Sydney, but it would be appreciated if further copies be addressed to the examiners in each subject, care of the Department of Education, Sydney.

There are no other regulations regarding selection of textbooks.

Queensland

Certain textbooks are definitely prescribed for use in schools—both primary and secondary. A list of additional suitable books, which teachers may use at their discretion, is provided by the Department, to which copies intended for consideration should be sent.

South Australia

In primary schools the teachers are limited to textbooks named in the Course of Instruction supplied by the Education Department at the instigation of the Director of Education.

In secondary schools there is a measure of choice, but teachers are limited to approved lists supplied by the Education Department in certain types of schools, and by the University of Adelaide in others.

Textbooks for primary public schools are prescribed by the Director of Education, who is assisted by an Advisory Curriculum Board consisting of the Superintendent of Primary Education, two school inspectors, and two teachers. This Board is assisted in its work by committees of teachers for each subject. These teachers are nominated by the Director of Education.

Similarly, the Director, assisted by superintendents, inspectors, and teachers with special qualifications, determines what textbooks shall be used in all secondary schools operating under the Education Department, except those which prepare candidates for university examinations, in which cases textbooks are prescribed by the Public Examinations Board connected with the University of Adelaide. The Director of Education and certain inspectors and headmasters in large secondary schools are members of this Board.

Tasmania

The prescribing authority is the Department of Education, but the selection of books is often referred to the inspectorial staff with the Senior Inspector as Chairman. Meetings are held as the need arises.

Suitable books are recommended in the Course of Instruction, but teachers are encouraged to use any books that appeal to them as being suited to the subject in hand.

Victoria

A certain degree of freedom is allowed, but teachers are expected to make their selection from the suggestive list published each year. Where any one of several textbooks is suitable, e.g. mathematics, the several textbooks are all placed on the suggestive list. In order to keep the cost of textbooks at a minimum, changes in the list are as infrequent as possible. In theory the freedom is not limited to books appearing on the list, but in practice the choice is nearly always made from it. If a selected textbook is not on the suggestive list, it is subject to the approval of the specialist inspectors on that subject.

Freedom is not otherwise restricted except that, all things being equal, preference is given to books published in Australia and that the cost of the textbook is a big factor in its selection.

For secondary schools, the only prescriptions are those imposed by the University for the Public Examinations, e.g. the readers for Latin and Greek or the texts for intensive study in French and German. Even in this case, however, it is the reading matter that is prescribed, and a particular edition is suggested.

There is no Book Selection Committee, but, before a book is placed on the suggestive list, the book is submitted to the specialist inspector concerned, who makes a recommendation to the Chief Inspector of Secondary Schools. If the recommendation is favourable several teachers may be asked to try it out. If, after this, its merits are considered sufficient, it is included in the suggestive list.

Western Australia

In the primary schools teachers have freedom in selecting textbooks (other than the prescribed reading books) with the approval of their district inspectors.

They have freedom in prescribing the infant reading books, provided the inspector approves, and the prices are not prohibitive.

In the secondary schools the books are more or less prescribed by the

university authorities for the Intermediate and Leaving Certificates. The University Public Examinations Board recommends certain textbooks, and though teachers are not absolutely bound to use these books, in practice they do. The lists of books are prescribed therefore by the Government, or by the Public Examinations Board of the University, and there is a Book Selection Committee in each case. The Departmental Book Selection Committee consists of the Director and the senior officers, and meets as occasion requires.

VI. New Zealand

In New Zealand schools books are not supplied free except in necessitous cases on the certificate of the head teacher, and then only to primary school children (Infants to Form II, i.e. Standard VI). In order, however, to reduce the cost of books to the minimum, and to avoid the expense to parents of providing a different set of books when their children move from one school to another, as is very frequent in New Zealand, the Department prescribes the books that are to be used in primary schools. In the infants' classes no uniform method of teaching reading is adopted, and consequently the teacher is allowed the choice between two series of readers which are based on the two main methods of approach. For the standard classes the use of only one book in each of the subjects, English, arithmetic, geography and history, is permitted. An authorised list of textbooks for primary schools is issued under the authority of Section 56 (5) of the Education Act, 1914, the present list being issued in 1929, there having been no additions since the revision of the books at that date. In *post-primary schools*, due to the co-operation of the principals, an exhaustive list of textbooks in every subject was obtained for the whole of the Dominion. From this list a choice of books was made in each subject and a list was issued containing the books authorised by the Department for use in these schools. No statutory authority exists for requiring school principals to restrict their choice of books to those named in the list, but there are very few books used which are regarded as unsuitable for inclusion in the list. In some cases approval is given for a book to be used in a certain school where circumstances make it desirable that approval should not be withheld. In smaller schools the list is looked upon very favourably as a guide for suitable books. This list is revised every year. A greater amount of freedom is enjoyed amongst teachers in the selection of readers in language subjects, and none of these is included in the approved list. Registered private schools—primary and secondary alike—have unrestricted choice of textbooks in all subjects.

The selection of the books for primary schools was undertaken by the senior professional officers on the primary side of the Department. On the issue of a new syllabus of primary instruction in 1928 authors were asked to submit textbooks in manuscript in conformity with it and these, together with textbooks already available from New Zealand or overseas publishers, were considered with a view to selection for inclusion in the list. The senior officers of the Department thus edited the greater number of the books now on the authorised list. The manuscripts finally selected were printed by a New Zealand firm, which undertook to publish them at an agreed-upon price on the understanding that the books would not be altered for five years. The financial depression gave rise to a demand for a reduction in the price, and to this the publishers agreed on condition that the period of authorisation was extended a further period. Under this agreement the present primary textbooks will remain in use until the end of the year 1937.

For the post-primary schools the Chief Inspector of Secondary Schools and his colleagues have for their perusal the latest books issued by the publishing firms in New Zealand and overseas during the year. He makes his report to the Director, and books are then added to or struck off the list in accordance with the Director's decision. There are no fixed meetings to consider the revision of the list, nor are there any regulations concerning this work, but it is usual to issue the list early in each year. If

representations are made by principals of schools for the inclusion of a certain book, it may be added to the list during the year. Any such additions are notified to teachers by announcement in the *Education Gazette*, published monthly.

VII. The Union of South Africa

Cape Province

(*a*) *Primary Schools* (*European, Coloured and Native*)

An approved list of textbooks is published. A teacher may, however, select for use in his school any book not on the list, provided that such book has been approved by the Superintendent-General of Education. The operation of the regulations governing the issue of free books to indigent pupils has in practice the effect of restricting the choice of the great majority of schools to the approved list, all school and pupils' requisites on the approved list being stocked by the Cape Province Requisites Store.

No book is prescribed by the Union Government or by the Provincial Administration or by the School Boards or by any body acting under Government authority.

The Superintendent-General of Education is the approving authority.

There is a Book Selection Committee, consisting of:

(*a*) Five inspectors of schools, appointed by the Superintendent-General of Education, and

(*b*) Four teachers appointed on the nomination of the two European Teachers' Associations.

This committee, which meets regularly twice a year, in January and in July, makes recommendations to the Superintendent-General of Education not only in regard to books, but also in regard to all matters relating to school equipment.

Two copies of books which it is desired to submit to the Book Selection Committee should be addressed to the Secretary, Book Selection Committee, c/o Department of Education, P.O. Box 13, Cape Town. Each book or article must be accompanied by a remittance of 10*s*. 6*d*., which will be returned to the person or body submitting the book if it is placed on the approved list.

Non-official authorities do not, in effect, prescribe any textbook.

(*b*) *Secondary, High and Training Schools* (*European, Coloured and Native*)

Teachers have complete freedom in selecting textbooks for their schools, subject to the general power of supervision of syllabuses exercised by the Superintendent-General of Education.

The same degree of freedom exists in all post-primary schools.

The only list of books published is that containing the titles of the standard works "set" for the Junior Certificate, Senior Certificate, Coloured Primary Higher Teachers' and the Native Primary Higher Teachers' Examinations.

Non-official authorities do not, in effect, prescribe any book.

There are no regulations in regard to the selection of textbooks in secondary schools.

Natal

In Government schools the syllabuses are prescribed, the books to be used are laid down by the Department and teachers in general have no choice. Before deciding upon the type of book to be adopted, however, the inspectorate and to a certain extent the head teachers of schools are consulted.

In Government Indian schools the pupils do not get their books through the Government stores; they are therefore allowed a certain amount of

freedom in their choice in so far as readers and arithmetic are concerned, where the requirements of the syllabus can be satisfied by using any standard book on the subject.

Government-aided schools have their syllabuses prescribed by the Department and in consequence utilise to a large extent the same books as the Government schools, but they are at liberty to depart from the prescribed lists.

In the case of private schools the Department has no jurisdiction, and they are therefore in a position to proceed on their own lines.

The fact that the Administration supplies through its departmental store textbooks for sale to pupils in Government and Government-aided primary schools for European and coloured children, free to teachers in all Government schools, and to certain free pupils in secondary departments of European and coloured schools, makes it necessary to limit the range of books stocked in order to avoid the accumulation of dead stock.

Specimen books received at the Education Office from publishing firms are placed in the specimen room, to which inspectors and teachers have access. When any change of book is contemplated, the attention of the officials dealing with the matter is drawn to any book which may require special consideration, and the Superintendent of Education appoints an *ad hoc* committee, usually consisting of inspectors and teachers.

For the Junior Certificate, Matriculation and the Union Department's Examinations, the special texts are prescribed by the governing bodies. There are no regulations regarding the selection of textbooks.

Orange Free State

The section of the Education Ordinance reads as follows:

"68. (1) Only such school books as are approved by the Director shall be used in the schools, and a list of such books shall be published from time to time as may be required.

"(2) During the third quarter of the school year, if it be considered necessary, the principals of all schools under a board and the inspector of education for the district shall be summoned to attend a meeting of such board for the purpose of framing a list of books for use in the schools in the district, such books to be selected from the list approved by the Director.

"(3) Two or more neighbouring boards may combine for this purpose.

"(4) The books so selected shall be introduced at the beginning of the following school year and shall, until the list thereof is revised, be used in all schools under such board or boards to the exclusion of all other books."

This section is applicable to all schools, primary and secondary, whether they be private, aided private or public, but in practice only the primary departments of public schools are made to conform strictly to the above requirements. The primary departments of private and of aided private schools usually select their textbooks from the list of approved books, but they are allowed a certain amount of latitude and sometimes they do choose books that are not on the Department's list. In the secondary departments of all schools the principals and staffs have an unfettered choice of textbooks, in fact the Department does not issue a list of approved textbooks for secondary departments of schools.

The method adopted in compiling the list of approved textbooks for primary schools (and primary departments of secondary schools) is as follows:

The Board of Inspectors, of which body the Director of Education is chairman, appoints a book committee of three inspectors. This book committee meets twice a year, in April and in October. All the books which are from time to time sent to the Department by the various publishers are considered by this committee, and three books which are deemed suitable for textbooks are placed on the Department's approved list, from which list the various school boards, in consultation with the

inspector and principals concerned, make their selection. The Department's list is revised from time to time.

The publishers should submit four copies of every book which they are desirous of bringing to the notice of the Department. One copy is sent to the Secretary, Education Department, Box 521, Bloemfontein, South Africa, and one copy to each of the members of the book committee. The copies of books sent to the Department are subsequently displayed in the library of the Teachers' Association, to which all teachers in the province have access. The addresses of the members of the book committee are the following:

(1) J. F. Enslin, Esq., Inspector of Education, Kroonstad, South Africa.
(2) J. Z. van Schalkwyk, Esq., Inspector of Education, Boshof.
(3) L. J. van Zyl, Esq., Inspector of Education, P.O. Box 521, Bloemfontein, South Africa.

There are no textbooks which are prescribed by non-official authorities.

Transvaal

(*a*) *Primary Schools*

In the primary schools of this province, teachers are limited in the selection of textbooks to those appearing on the approved list.

There is a book selection committee for the selection of books for the approved list. Meetings of this committee are held at irregular intervals, but towards the end of each year a meeting of the committee is held to select the books to appear on the approved list for the following year. Two copies of books to be submitted for probable inclusion in the list should be addressed to the Secretary, Book Selection Committee, P.O. Box 432, Pretoria, and should be accompanied by a remittance of 10*s.* 6*d.* in respect of each book submitted. This amount will be refunded if the book is eventually adopted for inclusion in the catalogue.

(*b*) *Secondary Schools*

In secondary schools, principals are permitted a free choice in selecting the textbooks for the pupils of their particular school, except in respect of books prescribed for the Transvaal Secondary School Certificate Examination by the Transvaal Board of Moderators. In this connection it is the usual practice to invite suggestions from teachers for consideration in connection with the drawing up of lists of prescribed books. The suggestions are submitted to the Language Sub-Committees of the Board, who are responsible for the final selection. Two copies of books for inclusion in the list should be forwarded to the Secretary, Transvaal Board of Moderators, P.O. Box 432, Pretoria.

(*c*) *General*

Every book submitted to the Department is considered by either of the above committees except in the case of textbooks suitable for the upper classes of the secondary school, in which case a notice appears in the Departmental Circular acknowledging receipt of such books and informing teachers that the books are available for inspection.

VIII. Newfoundland

Teachers have great freedom of choice in selecting textbooks for their schools, but in practice nearly all the schools use the same books—especially is this so from Grades VI to XII, the books in these grades being those either required or approved by the Council of Higher Education.

The Council of Higher Education, which approves or prescribes these books, is a subsidiary body of the Bureau of Education. The books are selected by a sub-committee of the Council, but must have the approval of the Council itself before they are authorised for the schools.

IX. The Irish Free State

Primary Schools.—Lists of books which have been sanctioned by the Department of Education for use in primary schools are published periodically, and school managers may select the books to be used in their schools for the purpose of secular instruction from these lists. Books which do not appear on these lists may not be used for secular instruction in a primary school without the special sanction of the Department of Education. The procedure followed in compiling the lists is as follows: books are submitted from time to time to the Department of Education by publishers; the Chief Inspector and other officials under his direction examine and report on the books submitted, and the Department, on consideration of these reports, decides whether a book may or may not be approved for inclusion in the list.

Secondary Schools.—No textbooks are prescribed by the Department of Education in connection with the secondary school curriculum and teachers in all recognised secondary schools are allowed to choose their own books. They are, however, required to furnish the Department with a list of the books selected for reading, and courses of reading will not be approved by the Department unless suitable books are provided. Books in Irish are published by the Department in co-operation with the Stationery Office. Of these a proportion are, on the recommendation of an Advisory Committee, approved by the Minister for Education for use by pupils of secondary schools, but none of the books approved as a result of the Committee's recommendations is prescribed for use in the schools. The Advisory Committee is a body of representative educationists nominated by the Minister for Education. It meets about every two months or more often if necessary.

Textbooks are prescribed by the universities for their Matriculation or Entrance Examination, but passes at the Department's Leaving Certification Examination, for which no textbooks are prescribed, are accepted by the universities in lieu of passes at their Entrance Examination.

Technical Schools.—Teachers in technical schools have freedom in selection of textbooks for their classes, and the Department of Education does not as a rule interfere, although it exercises through its inspectors a certain supervision over the teachers' choice of books. There are no lists of books prescribed or approved by the Department or by any other authority for use in technical schools, but the Department's inspectors may advise teachers in certain cases regarding the use of suitable books

X. British India

Assam

Lists of books for use in schools are annually approved by the Government and generally contain three alternative prescriptions from which school authorities have freedom of choice. There are one provincial and four local textbook committees.

The provincial textbook committee deals with publications in English, and the classical languages and also other publications which do not fall within the province of local committees. The committee consists of eighteen members, for whom the Senior Inspector of Schools acts as secretary. Meetings are usually held in Shillong in November.

The local committees are as follows:

The Surma Valley and Assam Valley Committees, consisting of ten members each, with headquarters at Sylhet and Yorhat respectively.

The Khasi and Jaintia Hills and the Garo Hills Committees, consisting of three members each, with headquarters at Shilling and Tura respectively.

In the beginning of each calendar year, the secretaries to the committees consult with the heads of all types of schools and inspectors, and obtain from them their recommendations for such alterations, if any, as may seem to them desirable in the approved list of textbooks current at the

time. These recommendations must reach secretaries not later than May 15th in each year.

When a new book is recommended, a copy of the book accompanies the recommendation. These recommendations, again with a copy of the book, are then forwarded to the Director of Public Instruction. Then, not later than the first week of July, the Director of Public Instruction will remit the books and recommendations to the textbook committees for consideration and advice. The final recommendations are submitted to the Director in the first week of November, who in turn submits them to the Government for final approval.

It is open to the Director of Public Instruction to receive and to invite the submission of books from authors or publishers and, if, after taking such preliminary advice as may be necessary, he thinks that they may find place upon the list, to send them to the textbook committees for opinion in accordance with the procedure outlined above. In the absence of reason to the contrary, only such books will be received as the approved list is weak in, and it is in the power of the Director of Public Instruction at any time to issue a notification restricting the submission of textbooks to specified requirements.

The University of Calcutta prescribes books for the Matriculation Examination on the recommendation of the various Boards of Studies.

Bengal

In 1929, the two textbook committees—one at Calcutta and the other at Dacca—were abolished and a Provincial Textbook Committee was sanctioned in its place. This committee, consisting of not more than thirty-six members, meets in the last week of the months of August and November. The committee appoints seven sub-committees, consisting of members of the committee and co-opted members, to deal with the following subjects :

(*a*) Books in all subjects for primary schools.
(*b*) English.
(*c*) Mathematics and science.
(*d*) History and geography.
(*e*) Bengali, Sanskrit and Pali.
(*f*) Urdu, Persian and Arabic.
(*g*) Miscellaneous subjects.

Sub-Committee (*a*) consists of twelve members, and the others of nine each.

During the first week of January in each year, the Director of Public Instruction issues a notification in the *Calcutta Gazette* to authors and publishers regarding the receipt of textbooks for consideration, and he may restrict the submission of textbooks to any subject or specified requirements. Six copies of books must be submitted by the end of March of each year. Any book approved normally remains on the list for three years. Application for a renewal of recognition must be made in the third year, or a book is liable to be removed without notification.

Prior to the publication of a new edition, all additions, alterations or omissions in the text of a sanctioned book must receive the sanction of the committee.

Books must not be submitted in MS. form.

Books prescribed by the University of Calcutta for the Matriculation Examinations and the Dacca Intermediate Board for the High School Examination are considered as included in the sanctioned list.

Bihar and Orissa

The textbooks to be used in the two highest classes of high schools are those prescribed or recommended by the Patna University for its matriculation examination. The textbooks to be used in the other classes

are selected by the headmaster from a list of approved textbooks prepared by a textbook committee, which is published annually under the authority of the Director of Public Instruction. The number of approved books for any one subject, class and language must not ordinarily exceed three, but for literature the committee is free to approve also not more than three books as supplementary readers in English and in each of the different vernacular and classical languages.

The textbook committee consists of twenty members, exclusive of the Director of Public Instruction, who is president *ex officio*. The Registrar of Examinations is secretary *ex officio* and the Inspectress of Schools is an *ex officio* member. The committee meets at Patna: the first meeting of the year is held in March or April, the second in July or August and the third in October or November.

The publisher or author of a book which is submitted for approval is required in the first instance to submit an application to the secretary with one copy of the book. The following particulars must be stated on the cover or title page of the book and in the application:

(i) name of the book; (ii) name of the author; (iii) name of the publisher; (iv) address of the author or the publisher; (v) standard or class for which the book has been prepared; (vi) edition; (vii) price.

It should also be stated whether the book has been previously submitted for examination and approval, and, if so, with what result. If the book is found *prima facie* suitable for examination (i.e. if it contains no indecent illustrations or unsuitable advertisements, or remarks offensive to religious communities or political parties, and is not plainly outside the syllabus, and is not printed in defective or unduly small type) the secretary asks for four more copies for circulation.

As stated above, the books to be used in the two highest classes of high schools are those prescribed or recommended by the Patna University. The university has Boards of Studies for the different subjects. These boards suggest books to the faculties, which prescribe the courses.

Books submitted to the textbook committee should be in print or typewritten. Works in manuscript are only considered if they are *prima facie* of a special and highly useful nature and cannot reasonably be printed before authorisation.

Bombay Presidency

All primary and secondary schools recognised by the Department are expected, under the Grant-in-Aid Code, to use only those books which are on the sanctioned list of school books.

Books for use in secondary and primary schools are brought on the sanctioned list by the Director of Public Instruction in consultation with the various school book committees.

There are six committees—one provincial school book committee for the consideration of English books for use in secondary schools, and five vernacular school book committees for the consideration of books in Marathi, Gujarati, Kanarese, Sindhi and Urdu. Each committee meets at least once a quarter.

No book intended for use in secondary schools will be placed before the provincial school book committee for consideration unless an inspector or a member of that committee considers that it is suitable, or an inspector reports that some aided or recognised school desires to use it. A book intended for use in primary schools must be submitted to the president of the vernacular school book committee concerned, who places it before the committee if he so desires. Prices of books submitted for the consideration of committees should be given in Indian money, and no book in manuscript form will be considered except in exceptional circumstances. Such cases should be referred to the Director of Public Instruction. Publishers should supply for review as many copies as there are members of the committee concerned. There are at present four members

on the standing sub-committee of the provincial school book committee and five members on the standing sub-committees of the vernacular school book committees.

A list of books sanctioned from time to time is published in the *Bombay Gazette*. A consolidated list of sanctioned books is published once in every five years.

The provincial school book committee consists of the Director of Public Instruction and not more than twenty-two members. The committee consists of the standing sub-committee and six special sub-committees.

Books on technical or industrial education must be referred to the committee of direction for technical education; those on commercial subjects to the Principal, Sydenham College of Commerce and Economics, and the Secretary of the Accountancy Diploma Board, Bombay, and those on agriculture to the Agricultural Department.

The vernacular school book committees each consists of ten members and meets at least once a quarter.

The choice of books from the sanctioned lists rests with the managers of schools. Primary education is under the control of local bodies, and books for primary schools are selected by the school boards on the recommendation of the Administrative Officer. In non-Government secondary schools the choice is usually made by the headmaster in consultation with the staff. For Government schools a special list of select textbooks is issued annually by the Director of Public Instruction in consultation with the educational inspectors and the Principal, Secondary Training College, and the choice of books from this list is left to the headmaster, who selects books in consultation with the educational inspector.

Burma

Freedom of choice of textbooks is given to teachers for all standards except for certain subjects of the Middle and High School Final Classes of the Anglo-vernacular and English schools and the seventh, ninth and tenth standards of the vernacular schools.

In High School Final classes, books on (1) English, (2) additional English, (3) vernacular, and (4) Pali are prescribed. On other subjects, a list of recommended books is supplied and the teachers may choose any books they prefer.

For the Middle School Examination, books are prescribed only for the vernacular. For other subjects, lists of recommended books are given and the teachers are at liberty to choose any books they prefer.

For the vernacular 7th, 9th and 10th standards, books are prescribed only for (1) vernacular and (2) Pali. For other subjects, the teachers are at liberty to make their own choice. The degree of freedom is uniform in all types of schools.

Lists of authorised textbooks approved by the textbook committee are published annually. The textbook committee consists of the Director of Public Instruction as *ex officio* President and not more than twenty members, official and non-official. The committee usually meets once annually in December and at other times when convened by the President. Any number of copies of textbooks may be submitted for the consideration of the textbook committee. The textbook committee has different subject committees, and each subject committee deals with its own subject.

The books for prescription in connection with the Anglo-vernacular and English High School Examinations are recommended by the conveners of boards of examiners of each subject and are considered and prescribed by the Examination sub-committee appointed by the Secondary Schools Board which controls the High School Final Examinations. This Board also advises the Director on matters connected with secondary education.

The books for prescription in connection with the vernacular 7th, 9th and 10th standard examinations are considered and decided by the Vernacular Examinations Board with the approval of the Director of Public Instruction.

CENTRALLY ADMINISTERED AREAS

Coorg and Bangalore

(i) *Indian Schools*

The teacher's choice is limited to a few textbooks approved by the Inspector of Schools which are selected from the list approved by the Textbook Committee of Madras. Since there is no such committee in Bangalore, the Resident in Mysore usually approves the Madras list for use in Bangalore and Coorg.

(ii) *European Schools*

The European School Examination Board annually prescribes the books for the High School and Middle School Examinations. There is no special book selection committee.

Delhi, Ajmer-Merwara and Central India

Teachers have a limited freedom of choice in selecting textbooks for the schools as follows:

Textbooks are selected from approved lists as far as the middle and primary classes are concerned. The Superintendent of Education, advised by the textbook committee, is the approving authority. The textbook committee consists of twenty-one official and non-official members. Its meetings are held quarterly, and six copies of each publication are required to be submitted to the Superintendent of Education for consideration of the committee. For matriculation, the textbooks are prescribed by the Curriculum Committee. The Curriculum Committee for prescribing courses of the High Department is appointed by the Board of Secondary Education. It is composed of twelve members elected by the Board of Secondary Education, on which certain teachers and professors are co-opted. This committee generally meets in September or October in the office of the Board of Secondary Education, Delhi. The publishers are required to submit seven copies of a book in Hindi and Sanskrit and three in all other subjects, to the address of the Board of Secondary Education. For Class VIII, textbooks are selected from the approved lists in September and October by the Headmasters' Association. This Association, consisting of headmasters of high and middle schools, meets in different schools in turn. With the exception of the Superintendent of Education the rest are non-official authorities.

No difference in freedom exists in different types of schools.

Hyderabad

In all schools, the administered areas follow the syllabus of the Hyderabad State, and work for the Hyderabad State Examinations. Thus for high schools, the textbooks which are prescribed by the textbook committee of the State, which meets annually, are prescribed.

For the primary and middle schools, textbooks are prescribed by the Education Department of the Nizam's Government.

In the European middle schools, the books used are those prescribed for the Cambridge Junior Locals, and in European primary schools the books are decided upon by the head teachers in consultation with the inspector of European schools.

Western India States Agency

Alternative textbooks in some cases are prescribed for use in the primary vernacular and secondary schools. They are prescribed by the Agent to the Governor-General in the States of Western India. In case of alternative textbooks, headmasters of schools select them and use them in school after obtaining approval from the Education Officer, Western India States Agency. There is no committee for selecting books. Books are sanctioned

for use as text, library or prize books by the Agent to the Governor-General as advised by the Educational Officer, Western India States Agency. Textbooks in the subjects of English and vernaculars are prescribed for students studying in the Matriculation Class, i.e. the highest class in high school every year by the Bombay University. There are no other regulations regarding the selection of textbooks.

Rajkumar College, Rajkot

For the Diploma Examination (Highest) textbooks in English are prescribed by the Government of India. For the remaining subjects, except vernaculars and second languages, a course is prescribed by them and selection of textbooks is done as mentioned above. Textbooks for Diploma Examination in vernacular and second languages are selected by the Government of India from those prescribed for the Matriculation Examination of the United Provinces or the Bombay University.

Central Provinces

A consolidated list of sanctioned textbooks is issued monthly as well as annually by the Education Department. Teachers are free to choose books from these lists for use in their schools.

Books for primary and normal schools are approved by the textbook committee, which is composed of official and non-official members, with the Director of Public Instruction as its President.

Books for secondary schools are approved by the High School Education Board, Central Provinces. This Board has committees of courses for various subjects and languages, each committee consisting of five members selected from officials and non-officials. No particular meeting-place is fixed in the case of the textbook committee. The various committees of courses under the High School Education Board meet late in December or early in January each year, usually at the place of residence of the convener. Three copies of each of the books intended for use in primary, normal and European schools are sent to the Director of Public Instruction, Central Provinces, for consideration by the textbook committee, and six copies of each of those intended for secondary schools are sent to the Secretary, High School Education Board, Central Provinces, Nagpur, for consideration by the various committees of courses formed by that Board. Books can be sent at any time by authors and publishers, and these are sent out by the secretary to the members of the committees concerned for examination.

No books are approved for schools otherwise than as stated above.

Madras Presidency

In recognised secondary and elementary schools for Indians in the Madras Presidency books that are not in the list of approved books issued twice a year by the Department of Public Instruction may not be used unless they are specially approved by the Local Government or by the Director of Public Instruction. In regard to books that are in the list, approval by a higher authority is not required. The textbook committee (a committee to advise the Director of Public Instruction in the selection of books for class use) during the five years ending with 1932 approved 5,763 books, i.e. an average of 1,152 books per annum. In addition to the usual six-monthly lists published by the Director of Public Instruction a consolidated list of books approved is published once in five years. The last quinquennial list was published in 1932. All Indian schools, regardless of whether they are managed by Government, or a local body or a private agency, or whether they are of the secondary or of the primary grade, are governed by the rule that no book may be used in them unless it is an approved book. This rule does not, however, apply to schools for Anglo-Indians and Europeans in which managements (or headmasters) have freedom to employ what books they choose so long as they are not

definitely objected to by the Department of Education. The exceptions to this are in respect of (1) books prescribed for the European High and Middle School Examinations which are selected by the European School-Leaving Certificate Board; (2) books in the Indian vernaculars which may not be those not in the list of books approved for use in Indian schools.

The textbook committee, which meets twice a year—in March and in October—at the office of the Director of Public Instruction, consists of forty members, in addition to the Director of Public Instruction, who is its *ex officio* President. The Committee's permanent postal address is: "Old College," Nungambakkam, Madras (Office of the Director of Public Instruction). Four copies of each work intended for consideration are required to be sent to the secretary of the committee. Non-official authorities such as the universities are not empowered to prescribe books for use in recognised schools. There are no other regulations in regard to the selection of textbooks.

North-West Frontier Province

The textbooks for high school classes are prescribed by the Punjab University, to which all the schools in this province are affiliated. The Education Department may recommend books for adoption in high school classes to the university, but such recommendations are rarely made.

Textbooks for middle and primary classes are prescribed by the Education Department, advised by the textbook committee, North-West Frontier Province. The lists of textbooks approved by the textbook committee and prescribed by the Education Department are published every year and contain alternative books for each subject. Out of these lists the headmasters of high schools are empowered to make a choice for use in their own respective schools, while the inspecting officers select suitable books for use in middle and primary schools in their jurisdiction.

No book which is not contained in any of the approved lists can be used in any schools without the previous sanction of the Director of Public Instruction, who is also *ex officio* President of the textbook committee.

The textbooks as indicated above are approved by the textbook committee for middle and primary classes. The members of the textbook committee are nominated by the Director of Public Instruction from among the members of inspection and teaching staff, managers of aided schools, professors of colleges and public men of literary taste in the province.

The committee meets at least once a year at Peshawar, the headquarters of the province, in the office of the Director of Public Instruction.

There are no non-official bodies in this province for consideration of school books.

Punjab

Lists of books are both approved and prescribed by the Government. The Director of Public Instruction, Punjab, is the approving and prescribing authority. The Punjab textbook committee advises the Education Department in the selection of suitable books for use in schools. The committee is composed of twenty-five members, each nominated for a period of two years, with the Director of Public Instruction, Punjab, as *ex officio* President. Most of the members of the committee are in intimate touch with the various types of educational institutions in the Province, primary and secondary, vernacular and anglo-vernacular schools, girls' schools, industrial schools, training institutions, Government and aided schools and schools under private or sectarian management. Meetings of the committee are held in the Educational Buildings during nine months ending June 30th. Books are submitted for consideration, with a view to their adoption as textbooks, to the Director of Public Instruction, Punjab, Lahore, or the Secretary, Punjab Textbook Committee, Lahore, with an official application form. Publishers and authors are required to submit six copies along with an admission fee of Rs.50 for remunerating the

reviewers. Textbooks in the vernacular of the province are required to be printed on the standard paper (20 by 30/16 weighing 30 lb. White No. 1) and priced at the rate of 550 pages to a rupee. Six pies are allowed for each illustration black and white prepared by the offset process or the line-block process printed on art paper weighing 45 lb. One pice is allowed for each coloured illustration printed by the three-colour process. No new books are recommended for adoption as textbooks unless they have some distinctive merit in comparison with the books already prescribed.

There are several sets of alternative textbooks approved by the Department from which teachers can select books for use in their schools. Teachers can select textbooks for use in their schools, but they should be approved by the Director of Public Instruction before their introduction in schools.

The United Provinces

English Institutions

Books intended for use in middle, high and intermediate schools of English institutions as *books of reference, books for the use of teachers, library books and prizes*, which are not considered by the Board of High School and Intermediate Education, are considered by a Books Committee for English Institutions. This committee, consisting of seven members, meets twice a year at Allahabad, at such time as may be approved by the Director of Public Instruction. The Director maintains a list of reviewers to whom books received for consideration of the committee are forwarded for review. The reviewers' reports are then placed before the next committee meeting, and the final recommendations are presented to the Director for approval.

Books *for inclusion in the curricula* of middle, high and intermediate classes of English schools should be forwarded to the Secretary, Board of High School and Intermediate Education, to reach that office before July 31st of each year.

Books intended *for libraries and prizes* for the middle, high and intermediate classes of English institutions, and other books for use in those schools but *not* for inclusion in the curricula, should be sent to the Personal Assistant to the Director of Public Instruction. Three copies should be sent.

Vernacular Institutions

Twelve copies of books for use in vernacular schools, in primary schools and English schools, in normal and training schools, and for the advanced Urdu and Hindi examinations, whether as textbooks, library books, prize books or books for the use of teachers, should be sent to the Secretary, Board of Vernacular Education.

When publishers wish their books to be considered for girls' as well as boys' schools, eight additional copies should be sent. Books on different subjects should not be sent under the same covering letters. All copies must reach the Board by July 31st in each year.

Publishers are required to print on the cover or first page the price and year of issue of a textbook, and whether a revised edition or a reprint. In the case of new textbooks submitted they must specify in the prescribed form the size, weight and quality of paper used, and also details of illustrations, whether line, colour or half-tone. Publishers are further required to forward two copies of a reprint or new edition to the Director of Public Instruction, and copies of every textbook included in the curricula to the Board of Vernacular Education for distribution to members of each committee.

An approved textbook remains approved for five years.

The Board of Vernacular Education consists of nineteen members and meets in July and December. The following book committees are appointed for the consideration of special subjects:

Book Committee A: to consider all books for the use of infant and

primary classes. Consists of eight members, including the Deputy Director of Public Instruction as Chairman.

Book Committee B: to consider history, geography and miscellaneous books. Consists of eight members.

Book Committee C: to consider mathematical books and books dealing with rural knowledge. Consists of eight members.

Book Committee D: to consider Urdu books. Consists of seven members.

Book Committee E: to consider Hindi books. Consists of seven members.

Book Committee F: to consider books for girls' schools. Consists of seven members.

No member of a book committee or of the Board of Vernacular Education who has or has had any pecuniary interest in a book under consideration shall take part in the discussion of its merits or vote upon its suitability for use in schools.

Canvassing of committees is not allowed.

XI. Indian States

Baroda

Special committees designated as textbook committees have been appointed by the Educational Commissioner for prescribing textbooks both for secondary and primary schools. No freedom of choice is given to teachers in the selection of textbooks. The textbooks are common for all schools, Government, aided and unaided.

The textbook committees for secondary and primary schools are composed of the following members:

Secondary Education

The Commissioner of Education, Assistant Commissioner of Education, Headmaster of Baroda High School, Principal of Maharani High School for Girls, Baroda, Headmaster of Methodist Boys' High School (aided).

Primary Education

The Vidyadhikari, the Baroda Vibhag Vidyadhikari, the Principal of Training College for Men, the Principal of Training College for Women, the Baroda City Vidyadhikari, the Headmaster of Raopura Marathi School, the Headmaster of Raopura Gujarati School, Manjulal Ranchhodlal Majmundar (Secretary).

The teachers in primary schools are not allowed to use books which are not prescribed or sanctioned by the Department.

The committees meet in the office of the Commissioner of Education. The meetings of the committees are held usually in January to consider whether any changes are necessary in the existing textbooks. The new publications received from publishers in the office of the Commissioner of Education are placed before the textbook committee for consideration. They are selected on their merits either as textbooks or prize or library books. For Matriculation examinations textbooks are independently prescribed by the Bombay University. The State Education Department has no control over the procedure of the University.

Hyderabad

Teachers have no choice in selecting textbooks for their schools. There is a list of books, approved by the textbook committee and prescribed by the Education Department. The committee consist of members of the Education Department and the Osmania University and specialists in various arts and languages. The books are submitted to the committee by the Director of Public Instruction and the meetings of the committee are held twice a year at his office. Two copies of publications

desired for selection as textbooks should be sent to the Director of Education.

The textbooks for the Matriculation Examination for admission to the Madras University are prescribed by the High School Leaving Certificate Board and those for the Osmania Matriculation Examination are prescribed by the Syndicate of the Osmania University.

Mysore

Textbooks are prescribed by a textbook committee. As a result, only one set of books is prescribed in the case of languages (vernaculars) for use in each class. In the case of English, alternate sets are recommended, to be selected from by the teachers concerned. In the case of other subjects like history and geography, except in the case of primary classes, a certain amount of choice is permitted.

The textbook committee is composed of forty-six members, with the Director of Public Instruction as President, and this committee is appointed by Government. It includes inspecting officers, headmasters of high schools and middle schools as well as representatives of the general public. It meets generally once a year, in November or December, at Bangalore in the office of the Director of Public Instruction.

The committee works through a number of sub-committees, one for each subject, viz.: English, Kannada, history and geography, science, Sanskrit, etc. A sufficient number of copies of books proposed to be prescribed as textbooks has to be sent by the publishers to the secretary of the textbook committee, who circulates them among the members of the appropriate sub-committee. In addition to circulation, there is a meeting of each sub-committee once a year for final selection of textbooks for the coming year or years. Books on languages for the classes going up for public examinations classes are changed every year, while books on non-language subjects are kept on generally for a period of three years at a time. Textbooks for the classes that go up for the public examinations classes are also subject to the scrutiny of the respective examination boards (bodies consisting of officials and non-officials appointed by Government which conduct the several public examinations).

XII. Tropical Africa

Kenya

There are lists of approved textbooks for each type of school and principals may requisition from this list. In order that it may be kept up-to-date, the lists are revised from time to time by a textbooks committee.

In secondary schools selection is necessarily influenced by the books set for the Cambridge and London Matriculation Examinations which are taken by the pupils attending these schools.

In regard to textbooks in use in African schools, the position is that in vernacular schools no control is effected over mission selections. The printing and publishing of vernacular books is still in its infancy and there are in certain groups of languages still no standards recognised in regard to orthography.

In Swahili the position is somewhat different. The Governments of Kenya, Tanganyika, Uganda and Zanzibar have a joint language board which lays down the official spelling of words and, in fact, furthers the development of Swahili as a language. This committee has a permanent office which translates and also supervises the translation of suitable books into Swahili.

Nigeria

Teachers have complete freedom in selection of textbooks in non-Government schools, which are the vast majority. In Government schools the votes of money for this purpose are controlled by the local superinten-

dents and books are purchased by them after discussion with their headmasters.

Where freedom exists, there are, however, lists of recommended books, drawn up by the Education Department with regard to the syllabus for the various types of school. The degree of freedom does in practice vary in different types of schools. There are not more than a dozen secondary schools, and in them the principal invariably makes his own choice, whether in Government or non-Government schools, though he is probably guided by the books suggested for the syllabus by the Department.

Lists of books are approved by the Department and circulated with suggested syllabuses. For the compilation of syllabuses and books the co-operation of missionaries and other non-Government educational agents is sought.

There is no University in the Colony. The newly-formed Higher College has issued a matriculation syllabus with a list of set books, but has not issued a list of other books recommended.

Northern Rhodesia

Missionaries in charge of schools have freedom of choice in selecting textbooks for their schools and the choice is then subject to the approval of the Director of Native Education.

The Department recommends books in its syllabuses. No books are prescribed for schools by non-official authorities except the missionaries. Local committees consisting of education officers and missionaries deal with the selection of the various vernacular textbooks in their areas.

Nyasaland Protectorate

European Schools

The European schools in the Protectorate are all conducted by private individuals or missionary societies and are purely primary. The proprietors of the schools have complete freedom in the choice of textbooks.

African Schools

In theory the Director of Education may prescribe textbooks for use in all assisted schools, i.e. schools which receive a grant from Government. (With the exception of a Government Jeanes Training Centre and one village school for Mohammedans all schools are conducted by missions). In practice and at the present stage of education development the choice of the teacher is restricted only by the limited supply of suitable textbooks, particularly in the vernacular. To augment this supply there has been constituted a Language and Textbook Sub-Committee of the Advisory Committee on Education in the Protectorate. Its main textbook purpose is (*a*) to encourage the production of suitable textbooks, (*b*) to examine all manuscripts submitted to it and to suggest such amendments as may appear desirable and (*c*) in certain cases to suggest that existing textbooks or books in preparation are not suitable for general use. Half its members are officers of the Education Department and half are Mission Educationists.

In addition to books prepared under the auspices of this sub-committee, the Education Department issues from time to time lists of books recommended for use in schools. Similarly the Department recommends, when necessary, that certain books should not be used.

The Language and Textbook Committee meets at least twice a year, but conducts its business at other times by correspondence. Manuscripts and textbooks are sent to the Secretary, who circulates them to other members.

Sierra Leone

(*a*) *Colony Primary Schools.*—The textbooks are chosen by the Education Department, which consults with others interested, particularly those

responsible for the training of teachers. Teachers do not have freedom of choice in this matter.

(*b*) *Protectorate Primary Schools.*—There is an approved list of textbooks and the different missions make selections from the list. The titles of new books are constantly being suggested for use by the inspecting officers during their periodical visits to mission schools. The Government does not object to the selections of books made by the missions if these are reasonable. At the present time the most difficult problem is the supply of suitable reading material in the English language. A certain proportion of Protectorate schools work in the vernacular, and in this direction there is, at present, no choice of textbooks, as there are only three school books printed in Mende, the most important native language.

(*c*) In the secondary schools, the choice of suitable textbooks is entirely a matter for the principal and staff; but the inspecting officers of the Department are frequently consulted before orders are placed with publishers. The range of books utilised in the higher forms of these schools is limited because such forms usually prepare for the various Cambridge local examinations and employ the prescribed textbooks.

Southern Rhodesia

Native.

The Department retains the right of approval or non-approval of books used in the school system and, for the guidance of schools and missionaries, lists of approved books are issued. As curricula develop, such lists will be supplemented and will always contain the possibility of alternatives under such a phrase as " or other suitable books approved by the Department."

The fact that the range of suitable books is definitely limited, and the further fact that within this territory it is more limited than in many other territories owing to local conditions, of necessity make it difficult to elaborate any machinery to deal with the situation, or to issue extensive lists of a liberal nature.

As the need develops, however, it is certain that the various missions will apply for guidance in connection with textbooks to parallel the courses which have been drafted, and the Department will have to assume certain responsibilities in connection with the production of such books, or, alternatively, the prescribing of books which may be available. This need will shortly arise and will gradually be met. As it develops, it will be necessary to appoint a small selection committee, and possibly a small publication committee, to advise the Department and to share responsibility. On these bodies official and non-official members will have place.

The number of African candidates for outside examinations, such as the Junior Certificate and the Matriculation examinations, is negligible, but individuals must follow books prescribed by the governing bodies.

A small language committee exists to advise the Government in connection with vernacular publications, the salary of a native clerk for transliteration purposes being met by the Government. As financial provision becomes avaliable, the work of this committee will be extended and should definitely assist in the production of vernacular texts along the lines followed by the Inter-territorial Language Committee of East Africa.

Europeans and Coloured.

The system of the Education Department of Southern Rhodesia is that there is an approved list of textbooks from which schools may choose their requirements. This applies both to primary and secondary schools, and also to the one technical school which exists in the colony. There is a book selection committee nominated by the Department, which revises the book list from time to time, usually once a year. The committee receives at all times of the year specimen textbooks from publishers, which are addressed either to the Director of Education or to inspectors by name, and are passed on to the committee.

Certain textbooks of a literary nature are prescribed for public examinations, some of them by this Department for its own examination known as the Junior Certificate Examination, which takes place at the end of the first three years of the secondary school course. Further, the Joint Matriculation Board of the South African Universities prescribes books, also of a literary nature, for its examination, but both those prescribed by this Department and those prescribed by the Matriculation Board are in the nature of "set" books.

There are no other regulations in regard to the selection of textbooks.

Uganda

In the Uganda Protectorate the supply and, therefore, the choice of suitable textbooks is still limited, although, chiefly through the efforts of the Inter-Territorial Language Committee, the output of carefully edited books both in English and Swahili increases each year.

Books are required in various languages according to the following types of schools:

(*a*) *Sub-grade and Elementary Vernacular Schools.*—*Luganda* is the vernacluar for the Buganda Kingdom and for the Busoga district. In districts outside this area books are required in the *local vernacular* for the lowest classes and in *Swahili* for the upper classes. In other vernaculars the supply is even more scanty and outside religious books is confined to translations of small works on hygiene, agriculture and arithmetic. The publication of school vernacular books constitutes a special problem, since publishers at home are unwilling to finance publications with only a limited and local demand.

(*b*) *Post-elementary Schools.*—Middle, Junior Secondary and Makerere College use textbooks in English. The Swahili section allows more choice, for Swahili is an inter-territorial language and books can be published in this lingua franca quite cheaply. All books for use in schools pass through the scrutiny of members of the Inter-Territorial Language Committee. This body meets in turns in one of the four East African territories.

English Textbooks

Many books used as textbooks in English schools have several defects from the African's point of view. Such books have an absence of local colour and are crammed with ideas entirely outside the ken of the African —few of whom have travelled outside their own country. Hence it has been found necessary to have special African editions prepared for such subjects as English, hygiene, geography and arithmetic.

This Department has received from time to time general advice on the choice of books from the Advisory Committee on Education in the Colonies. Particular mention should be made of their printed memorandum Miscellaneous No. 40 dated September 1929, and entitled "Memorandum on the Preparation and Selection of English Reading Books for Non-English Speaking Pupils."

In accordance with the decision of the executive council of the International Institute of African Languages and Cultures to publish lists of textbooks in actual use in Africa in April 1930, a list of hygiene books (16 in English and 31 in other languages) was published in *Africa—vide* Vol. III, No. 4, and Vol. V, No. 1.

A similar list of fifty-one nature-study and agricultural books was published in *Africa*, Vol. V, No. 4.

The syllabuses for the junior secondary and middle schools contain at the end of each subject a list of recommended books both for class and teachers' use. These books were selected in the first instance by a syllabus committee and secondly as the result of suggestions made by

Europeans in charge of schools. In the case of special subjects (e.g. agriculture) suggestions are made either by tutors at Makerere College or by officers of the departments concerned.

Zanzibar

Rural Schools.—Nearly all the Zanzibar Government schools are of this type. These schools are all elementary and are staffed by locally trained Arab and African teachers. The medium of instruction is Swahili and no foreign language is taught (except the minimum of Arabic required for the purpose of reading the Kuran). The Inter-Territorial Language Committee, formed in 1930 for the purpose of developing a standardised Swahili for use throughout East Africa, plays a most important rôle in the production of textbooks and Swahili literature generally. The various East African Governments concerned have agreed to use in their schools only such Swahili books as have received the imprimatur of this committee as far as diction is concerned. New Swahili textbooks are being produced in East Africa as fast as possible. They are sent in typescript by the authors to the secretary of the Inter-Territorial Language Committee and the typescripts are then circulated by the secretary to each East African Education Department for review, in order to decide whether they appear suitable for use in the schools of the territory. In this way only such textbooks as are approved by one or more of the Education Departments are published and no publisher should take the risk of publishing any Swahili book which does not bear the imprimatur of the Inter-Territorial Language Committee.

Swahili textbooks in use in Zanzibar schools are selected from the Inter-Territorial Language Committee lists by the Department of Education. Lists of books stocked are circulated to head teachers together with an indication of the class in which each is suitable. Head teachers are allowed to choose books from these approved lists.

Details regarding the constitution and functions of the Inter-Territorial Language Committee can be obtained on application to the Secretary, P.O. Box 160, Dar-es-Salaam.

Middle Schools.—There are two Government and four grant-aided Indian middle schools. English is the second language in all of them. In the Indian schools Gujarati is the vernacular. In the two Government schools English books are chosen by the Department. The head teachers have the same option in the case of Swahili books as in rural schools. The managing committees of the Indian schools select their own English and Gujarati books subject to approval by the Department of Education.

Teachers' Training School.—The headmaster is allowed to choose his own textbooks (subject to the right of veto if necessary by the Director of Education or Chief Inspector of Schools).

Commercial School.—The master in charge usually suggests the textbooks he wants, and these are ordered for him unless the Director of Education or Chief Inspector of Schools considers the choice unsuitable.

Government Girls' School.—In the case of the Government Girls' School (Arab and African) the Superintendent of Female Education orders such books as she wishes. In the lower classes the materials, cards, etc., required to teach reading and arithmetic are of her own design and are used in the infant classes in all Government schools. Swahili readers, etc., are chosen by the Superintendent of Female Education from the approved lists.

Secondary Schools.—There is at present no secondary education.

XIII. British Guiana

(*a*) *Primary Schools.*—With the exception of a few books prescribed for special examinations, teachers in this colony have freedom of choice in the use of textbooks. At an inspection, however, comment is made

in the report on the suitability of the textbooks in use, and where they are not considered suitable, recommendations are made, which are usually adopted. In practice, owing to the economic conditions, the number and variety of books used in the primary schools is very limited.

(*b*) *Secondary Schools.*—In the secondary schools, the books for each form are selected by the headmaster (or headmistress), usually with the advice of the staff. In the forms above the third, the pupils are prepared for the Cambridge or the Oxford and Cambridge Joint Board Certificates. Consequently, the choice of books is determined by the requirements of these examinations.

There is no book committee, nor is there any list of approved books. Certain books are from time to time recommended by the Education Department for particular purposes (e.g. pupil teachers' and scholarship examinations) or for general use in primary schools. This is done by Departmental circular, or by a notice in the Official Gazette.

XIV. British Honduras

Teachers have some choice in selecting textbooks, subject to the approval of the school managers in certain cases—such as reading books—as practically all the schools, both secondary and primary, are associated with some religious body. The Government does not interfere. Books on geography, English history and school management are usually such as are recommended by the Education Department.

XV. British West Indies

Barbados

In the selection of books for primary schools, teachers make use of an official list compiled by the Inspector of Schools in 1915. As the list is in some respects out-of-date, teachers are allowed a good deal of freedom in the selection of more modern publications suggested or approved by the Inspector.

All textbooks in primary schools are provided by the Government and the Inspector of Schools is the sole prescribing or approving authority.

In the secondary schools the selections of textbooks is left entirely in the hands of the individual head teachers.

Bermuda

There are two main types of schools in Bermuda: (*a*) the purely elementary schools and (*b*) the so-called higher grade schools, about six or seven in number, which take children of all ages from 5 to 18 years and teach secondary school subjects in the upper classes.

In the case of the elementary schools, the textbooks used are subject to the approval of the Education Department. During the last two years textbooks in certain subjects have been selected by the Department and issued free of charge to the schools. Further textbooks will be issued by the Department if funds permit.

In the higher grade schools freedom of choice is allowed, though books would not be used to which for any reason the Education Department had taken exception.

No lists of approved books are issued.

Schools which send in candidates for the Cambridge Local Examinations use the special books set for these examinations. Otherwise no books are prescribed by non-official authorities.

There are no other regulations in Bermuda regarding the selection of textbooks.

Grenada

Teachers in secondary schools enjoy without the least restriction the privilege of selecting textbooks for their schools. In primary schools,

whether wholly or partly maintained from the general revenue of the colony, it is the duty of the Director of Education to recommend textbooks for sanction by the Board.

There are no special regulations in regard to the selection of textbooks.

Jamaica

The Education Department does not issue any approved list of books. Books and material are not supplied free to pupils and therefore parents are naturally adverse to many changes.

School books written for the West Indies are generally out-of-date and few have any local colour or local interest. While each education department in the West Indies has control of its own textbooks the market is naturally small, but there is a suggestion that there should be a committee set up for the selection of suitable books for the whole of the West Indies. If this were done, the provision of specially written books for the West Indies market would become a practicable proposition. In the meantime, books intended for Jamaica should be submitted to the Director of Education, Education Department, Jamaica.

Trinidad

In secondary schools, the principal is free to choose any textbooks that he considers suitable.

In primary schools, the managers usually select the books, subject to the approval of the Education Board. In practice, managers invariably take the advice of the Director of Education in the choice of books.

Government and denominational schools, both secondary and primary, have the same degree of freedom.

XVI. Ceylon

1. *English and Bilingual Schools*

Government and Aided Senior Secondary and Collegiate Schools.—In the selection of textbooks teachers have freedom of choice, limited only by the requirements of the Junior and Senior Certificate examinations.

Government and Aided Primary, and Junior Secondary Schools.—Choice is limited in the highest class in history and in literature by the requirements of the Junior Certificate. In the other classes in Government schools choice is limited by the approval of inspectors. In assisted schools the inspectors are looked to for advice.

2. *Vernacular Schools*

Government Senior and Junior Secondary and Primary Schools.—Teachers select textbooks in consultation with the inspectors from lists published by the Director of Education. Choice is limited in the highest classes in literature by the requirements of the Certificate examinations.

Aided Senior and Junior Secondary and Primary Schools.—Theoretically the teachers in aided schools have complete freedom of choice of textbooks, limited only in literature for the Certificate examinations. The influence exercised by the Government inspectors is, however, strong and results in a virtual limitation of choice to the books in the lists referred to below.

Textbook Committee

There are three textbook committees, one for English books, one for Sinhalese and one for Tamil. Their work is carried on almost entirely by the circulation of books. In the case of the English committee six copies of each book are usually submitted by publishers; in the case of the Sinhalese and Tamil textbooks seven copies. Such books may be sent to the Director of Education, Colombo. Books submitted in this way can be considered at any time.

English Textbook Committee

The Assistant Director (Training), (Chairman).
The Principal, Government Training College.
The Chief Inspector of Schools.
An Inspectress of English Girls' Schools,
and three Heads of Schools.

Sinhalese Textbook Committee

Supervisor of Sinhalese Education (Chairman).
The Principal, Government Training College.
A District Inspector of Vernacular Schools.
A Representative of the Ceylon Vernacular Teachers' Union.
Chief Translator, Education Office.

Tamil Textbook Committee

Lecturer in Tamil, Ceylon University College.
A District Inspector of Vernacular Schools.
Tamil Translator and Interpreter, Education Office,
and three other members.

Lists of books which have been approved by the Director of Education, i.e. by Government, are published periodically.

Books are prescribed by the Director of Education only for certain public examinations.

Textbooks for Public Examinations

Few textbooks are prescribed for public examinations except in literature.

In the case of the English Junior and Senior Certificates, textbooks are mainly selected from the lists prescribed by the Cambridge Syndicate for their examinations. Textbooks for the study of local Oriental languages are recommended by the Director of Education to the Cambridge syndicate. Such recommendations are invariably accepted. Only standard works set for examinations are thus prescribed. Whenever a selection committee recommends a book for inclusion in the examination syllabus, such recommendation requires the approval of the Director of Education before it is adopted.

In the case of the Sinhalese and Tamil Junior Certificate examinations, textbooks in literature are prescribed by the respective textbook committees.

There are no other regulations governing the selection of textbooks, except that in Government schools during the existing financial stringency a book once introduced may not be changed until it has been in use for at least three years. In aided schools, inspectors may not recommend a change under three years.

XVII. Cyprus

(*a*) *Elementary Schools.*

Textbooks are prescribed by the Boards of Education (Greek-Christian and Moslem) according to the Elementary Education Law, 1929. The Boards consist partly of *ex officio* members and partly of members appointed by the Governor; the Director of Education is secretary of the boards. The boards meet at Nicosia or elsewhere at irregular intervals, at least twice a year. The Greek-Christian Board has appointed a sub-committee to deal with textbooks.

The boards from time to time issue lists of books approved for use in elementary schools for a given period: these books are for the most part those approved by the Ministries of Education in Greece and Turkey for use in the elementary schools of those countries. In certain subjects textbooks are compulsory; in others their use is left to the discretion of the teacher: in all cases, however, the teacher is free to select books from the lists approved by the boards.

Persons wishing to have books added to the approved lists should submit three copies to the Director of Education.

(*b*) *Secondary Schools.*

The selection of textbooks is in the hands of the committee or governing body of each school, whose authority teachers desiring to introduce new books must obtain. In schools which are recognised by the authorities in Greece and Turkey as equivalent to gymnasiums or lycées in those countries, certain books are prescribed by those authorities as part of the course which must be completed before students from these schools are admitted to universities in those countries. (Admission to these universities depends normally on the completion of a prescribed course and not on the passing of a matriculation examination.)

XVIII. Fiji

In Government schools teachers are free to choose textbooks for their schools subject to the approval of the Director of Education.

In assisted schools no books are to be used which have not been expressly approved by the Board of Education. A list of approved books written in Hindi has been prepared. As regards textbooks written in English, approval is at present freely given in order that, before an approved list is compiled, the relative merits of different books may be judged from experience.

Sample copies of new publications should be addressed to the Director of Education, who obtains an opinion on them from headmasters of schools of a type for which the book appears suitable.

XIX. Hong Kong

I. *Government*

Anglo-Chinese Schools.

(*a*) *Primary.*—Headmasters of Government primary schools have freedom of choice of textbooks from a list published by the Education Department.

(*b*) *Secondary.*—Headmasters of secondary schools adopt textbooks subject to the approval of the Director of Education. Some are "set" annually by the University of Hong Kong for the School Leaving Certificate and Matriculation Examinations.

II. *Non-Government*

Headmasters of non-Government Anglo-Chinese schools have freedom of choice of textbooks subject to the approval of the Director of Education. Books prescribed as above by the University of Hong Kong are also used.

Vernacular Schools.

The Board of Education publishes a syllabus and list of textbooks for vernacular schools. Teachers are free to choose textbooks from this list, and permission to modify may in suitable cases be obtained from the Director of Education.

XX. Malta

In the secondary schools the textbooks in the teaching of both languages and science are laid down in the syllabus.

In the central and elementary schools, whilst teachers are more or less tied down to set textbooks in the study of languages, they are given a great amount of latitude in connection with the other subjects.

The textbooks are all chosen by the Director of Secondary Schools and by the Director of Elementary Schools, subject to the approval of the Minister for Public Instruction.

For Matriculation Examinations no textbooks are prescribed as distinct from standard works set for such examinations.

XXI. Mauritius

The Schools Committee is responsible for the choice of textbooks in use at primary and secondary schools. In certain cases, where books are not prescribed but only recommended, a relative freedom of choice exists, but is limited to a type of book similar to the one recommended, the freedom being the same in primary as in secondary schools, and the choice is subject to approval by the Superintendent of Schools.

The Superintendent of Schools, assisted by a committee of eight members (a purely consultative body), is responsible for syllabuses and textbooks so far as purely local examinations are concerned and books are not prescribed by non-official authorities. The same course is followed for the examinations held locally by the universities of Cambridge and London, except in the case of prescribed books on literature, etc.

At the Royal College and its branch the Port Louis School—two educational establishments altogether independent of the Schools Department—the choice of textbooks rests in the hands of an official committee—the Royal College Committee (a purely consultative body).

XXII. Palestine

For Government schools Arabic textbooks are selected by a Departmental Committee formed of officers of the Department of Education. English textbooks are selected by the Departmental officers who organise the teaching of this subject.

In non-Government schools textbooks are selected by the authorities concerned.

Textbooks for the Palestine Matriculation and other examinations conducted by the Board of Higher Studies are prescribed by the Board.

In schools controlled by the Jewish Agency selection is not governed by rigid regulations. Teachers have liberty in their choice of textbooks, but for any new books adopted the approval of the Jewish Education Department must be obtained. Hitherto the number of textbooks in Hebrew has been rather limited, but it is tending to increase, and publishers before printing new books usually refer the manuscripts to the Jewish Department of Education for criticism and approval by specialist sub-committees. English textbooks are recommended by a committee of officers of the Government Department and selected teachers of the subject in Jewish schools.

XXIII. Seychelles

In the primary (grant-in-aid) schools, the greatest freedom is allowed to teachers in the selection of textbooks for their schools. There is no book selection committee, but the Governing Body of Education sometimes acts as such. The Government has no control over secondary education.

XXIV. Straits Settlement and Federated Malay States

Selection of textbooks is in the hands of the headmasters, who have practically a free hand, although recommendations are made by the Department and definitely unsuitable books would be prohibited by the powers given by the Law (Registration of Schools Ordinance, Straits Settlement, and Enactment, Federated Malay States).

Harley V. Usill.

Two Chapters on Education in the United Kingdom

CHAPTER ONE

Religious Education in Scottish Schools

The Growth of the Scottish School System

THE national system of education in Scotland owes its inception to the influence of the Church. In the last decade of the seventeenth century she induced the holders of the teinds (tithes), which at the Reformation had been largely alienated from religious purposes, to set up a school in each parish. The meagre allowances for stipend, though supplemented by small fees or occasional gifts, were amazingly small even for that age ; yet there was sufficient enthusiasm for learning to produce a remarkable race of teachers, many of them of university standing, whose work laid the foundations of what was for generations the best educational system in Europe.

The heritors provided the funds for this system : the Church saw to its administration. The bond thus created between Church and school was strengthened by the custom, only recently extinct, whereby licentiates for the ministry spent some years in teaching until an appointment should be forthcoming to the charge of a parish. This had the double result of ensuring a high standard of learning and a definite course of religious teaching. The Bible and the Shorter Catechism were the textbooks on which cultural education was based, and in many cases they were expounded by experts. The bias thus given to Scottish character explains much in the national history which is often wrongly attributed to the political and economic forces released by the Union of the Parliaments a decade or so later.

The next stage in development began with the establishment of the training system in 1828 when that system began in the Drygate of Glasgow. Nine years later the Glasgow Education Society's Normal Seminary was instituted at Dundas Vale in that city under the Rectorship of John McCrie, son of a great Church historian. Some years later the seminary was transferred to the Church. Following upon the Disruption of the Church in 1843 other training centres were erected, and for many years the Church of Scotland and the Free Church of Scotland maintained Normal Colleges in Glasgow, Edinburgh and Aberdeen. The Church of Scotland

Colleges had attached to them residential hostels for women students. In later years the Episcopal Church of Scotland and the Roman Catholic Church had their own centres for the training of teachers. In all these colleges training in religious instruction formed a vital part of the curriculum, thus ensuring continuity with the past.

The Act of 1872

The Education (Scotland) Act of 1872 wrought a great change in the vast majority of Scottish schools, the control of which passed from the Presbyterian Churches to a State Department. The Churches, however, as a condition of the transfer of their numerous buildings to the new School Boards, secured under the Act the continuance of religious teaching in the schools according to " use and wont," by which the Bible and the Shorter Catechism retained their place as manuals of religious training, subject, however, to a right on the part of parents of " contracting out." This " privilege " was very rarely exercised, but its existence necessitated the restriction of religious teaching to a period outside the registered hours of attendance. In practice this has resulted in the almost invariable setting apart of the first period of the school day for religious teaching. Where the school authorities are interested in the subject this has proved advantageous rather than otherwise.

The Act of 1872 provided also for the recognition of schools which had not been transferred to the School Boards by their owners, where such were considered necessary for the educational needs of the district and a sufficient number of children existed whose parents required religious teaching according to the standards of their faith. The maintenance of such schools might not be charged against the rates, though they were eligible for parliamentary grants. As educational requirements continued to increase, the upkeep of such schools became a growing burden upon the Churches which had decided to keep their schools wholly under their own control.

The Transfer of the Training Colleges

The next great development of the Scottish system of education marked a further stage in the severance between Church and School. The task of maintaining a sufficient supply of trained teachers was becoming a burden which only the State could reasonably be expected to bear. In 1905 an agreement was reached with the Presbyterian Churches whereby their six well-equipped training centres were handed over entirely to State control, with the proviso that a place should be found in the new system for training teachers in the principles and methods of religious instruction. To make this effective the two Churches, the Church of Scotland and the United Free Church, which now transferred their training colleges as they had already transferred their schools, were given the privilege of appointing at their own charges a Director of Religious Instruction in each of the new training centres which, following upon the

agreement of 1905, were set up in Edinburgh, Glasgow, Aberdeen and St. Andrews-Dundee, and the Churches concerned were given representatives on the four Provincial Committees for the Training of Teachers by whom the respective colleges were controlled. The training centres retained by the Roman Catholic and the Scottish Episcopal Churches were placed under separate committees largely drawn from representatives of their own Churches.

The Act of 1918

The Education (Scotland) Act of 1918 wrought great changes in the system which had developed thus far. By placing the schools under the control of an Education Authority for each of the county areas and of the four great cities, it made effective provision for linking primary, secondary and technical education over the whole country. It continued the arrangement whereby, under the Act of 1872, religious instruction was given in all public schools according to " use and wont." At the same time it provided for the transference to the new authorities of the schools hitherto controlled by the Roman Catholic and Scottish Episcopal Churches. The religious interests thus affected were safeguarded by giving representatives of the Church concerned an effective voice in the appointment of teachers who possessed the educational requirements necessary in each case and whose religious beliefs satisfied the demands of their respective Churches.

Since 1918 practically the whole educational system of Scotland is thus—so far as concerns what may be termed " secular " education—under State control. The recent Local Government Act of 1929 did not directly affect education except on its administrative side, though its administrative changes may yet radically influence educational development. It abolished the system hitherto in vogue whereby education has been administered by an *ad hoc* authority, and placed the schools under the control of the county and city councils. No change was made in the conditions affecting religious instruction, but provision was made under the Act for a small minimum number of local representatives of the various Churches in Scotland being co-opted to the education committees of the councils in each area. It is yet too early to pass an opinion upon the effective value of this concession to the vital interests concerned. On the surface it would seem that, while the spiritual nature of all true education is becoming steadily more manifest, there is a tendency to drift away from any external form of religious control, but time will show to what extent this is real.

The Existing Problem of Protestant Religious Instruction

In these circumstances the matter of religious influence in the schools becomes one of urgent importance, and the character and personality of the teacher is clearly its centre of gravity. The system by which, under the successive Acts of 1872, 1918 and 1929, teachers

are appointed to Roman Catholic and Scottish Episcopal schools ensures that religious education is maintained in accordance with the faiths of the Churches concerned. The fact remains that Scotland is still—even allowing for the abnormal Irish immigration during recent years into the Clyde Valley—overwhelmingly Presbyterian. At the last census the population of Scotland was returned at 4,880,000, while the Church of Scotland has a steadily increasing communicant membership which, according to the 1932 returns, amounts to 1,287,438. To these should be added the large numbers, especially in the northern area, belonging to the smaller Presbyterian Churches, and the membership of other Protestant Churches is far from negligible either in numbers or in quality. It has to be remembered also in this connection that communicant membership of the Presbyterian Churches is largely identical with the adult population owing to the fact that admission to communion takes place at the earliest only during the later years of adolescence, while in the Highlands a considerable proportion of Church people do not enter upon full communion till late in life.

How far then, from the point of view of the religious faith of the overwhelming majority of the Scottish people, is religious instruction an effective part of the Scottish educational system ? An adequate answer to this question must consider (1) the provision of a suitable curriculum, (2) the teaching power available, and (3) the spirit in which the work is undertaken.

The Curriculum

About 1919 representatives of the Church of Scotland, the United Free Church and The Educational Institute of Scotland (the last named being the official organisation of the teachers of Scotland) met and drew up a scheme of religious education. That scheme was in common use till 1929, when it was superseded by *A New Syllabus of Religious Instruction for use in Scottish Schools* (published jointly by the Church of Scotland and The Educational Institute of Scotland, 1*s*. net), which has since been officially adopted by 29 out of the 35 Education Committees of County and City Councils, and forms the basis of religious teaching in the vast majority of schools throughout the country.

The scheme, which was drawn up by a Joint Committee representing the Church and the Institute, together with a number of co-opted persons with specialised knowledge, is fully graded and covers the whole school period from 5 to 18 years of age. The Syllabus is classified as follows : Infant Department (ages 5–7) ; Junior (7–9) ; Senior (9–12) ; Advanced Division (12–15) and Secondary School (12–18)—the first three years of the Secondary Section being identical with those for the Advanced Division. The six-year course for secondary schools forms a " discipline " in no way inferior to the accepted courses of instruction in the rest of the secondary curriculum.

The Infant, Junior and Senior Course

In consonance with Scottish tradition the scheme is largely Biblical. As the Shorter Catechism has of late years fallen into disuse in many schools, it has been left entirely to the discretion of Education Committees to decide if and to what extent it shall still form part of the scheme adopted for each area. The greatest change effected in the hitherto accepted systems in use is in the presentation of the subject-matter. The strictly historical approach has been entirely abandoned for the first six years; the New Syllabus centres its teaching round the Person of Christ. The Gospels furnish the greater part of the lesson material during those early years; the Old Testament is used (to an increasing extent each successive year) to illustrate and amplify the distinctively Christian teaching thus given. In the last year of the Senior Course a consecutive study of the Life of our Lord gathers up and systematises the work of the preceding years.

The Secondary Course

In the Secondary Syllabus the teaching is definitely systematic. The first three years (which, as already said, form also the curriculum for the Advanced Division Schools, which schools include by far the greater number of scholars) are planned to cover the following themes:

First Year:	1st Term:	(O.T.) The People from whom Jesus came.
	2nd Term:	(N.T.) The Doings of Jesus and the Impression He made.
Second Year:	1st Term:	(O.T.) The Revelation of God in the Old Testament.
	2nd Term:	(N.T.) The Teaching of Jesus.
Third Year:	1st Term:	(O.T.) Worship in the Old Testament.
	2nd Term:	(N.T.) The Growth of the Church.
Fourth Year:		The Bible as Literature.
Fifth Year:		(*a*) The Four Biographies of Jesus. (*b*) The Letters of Paul.
Sixth Year:		(*a*) The Growth of the Bible Literature. (*b*) A Detailed Study of some of the Books of the Bible. (*c*) Supplementary Course: The Development of Christianity.

The Syllabus further provides a simplified course which has found ready acceptance in small rural schools. Suggestions are given for memory work suitable for different stages, and the appendix on School Prayers and School Services has had a marked effect on the corporate religious life of schools of all types. A comprehensive and carefully graded Bibliography gives useful help for teachers' personal study and lesson preparation.

When the Syllabus was drawn up it was agreed that after an interval sufficient to form considered judgment of its value—say 8 or 10 years—it should be revised in the light of experience.

Training of Teachers

The preparation of teachers for the work of a syllabus such as that outlined is a duty which falls on the Church, and to her Directors of Religious Instruction in the four national training centres belongs the all-important task of such preparation. The time at their disposal depends on the particular type of course followed by the various groups of teachers in training. These include at each centre (1) university Honours graduates, training for teaching in secondary schools, (2) university graduates, training for work in non-secondary schools, (3) non-graduates, taking a two- or a three-year course, many of whom qualify for specialised teaching. Graduates receive one year's instruction at the training centre: the normal course for non-graduates will in future cover a period of three, instead of as hitherto two, years.

The course of instruction deals with the Old and the New Testament and aims at showing the progressive character of the Divine revelation as well as at tracing the interdependence of the various books and their literary history. Emphasis is laid upon modern methods of teaching, and opportunity is given for both demonstration and criticism lessons. Consideration is given during the course to the use of the New Syllabus, as well as to the principles and practice of worship in the schools. Students are enabled to realise that " religious education is not merely the teaching of Bible stories, but is rather the teaching of the eternal truth in them, their permanent message for life and godliness, that its object is the training of children in faith and goodness."

The Diploma in Religious Education

In 1932 an important experiment was begun at St. Andrews-Dundee Centre. From various quarters representations had been made to the Church that the secondary section of the New Syllabus demanded at certain stages more highly specialised knowledge than could be given in the lecture-courses available, and it was suggested that further training would result in more advantage being taken of the possibilities of the Syllabus. Accordingly, after discussion with the authorities at the various training centres, a course of study for a Diploma in Religious Education was instituted at St. Andrews-Dundee, the aim of which is to provide graduates with an adequate background for teaching the Bible in Advanced Division and Secondary Schools. Attendance is required at lectures for 180 hours, practical teaching occupies 80 hours, a period of service is undertaken in some form of Church and social work relating to youth organisations, and candidates must reach the pass mark in each of four examination papers covering the prescribed course, the external examiner for which is the Regius Professor of Ecclesiastical History in Edinburgh University. The Principal of Dundee Training Centre writes in his annual report: " It is hoped and anticipated that the influence of these specially trained Diploma

students will not be confined to their own classes in the schools to which they will be later appointed. We look to them to play their part in the religious life of the school as a whole, in making the school a community pervaded by a religious atmosphere."

The influence of the Directors of Religious Instruction is greatly strengthened by the cordial support given to their work by the Principals of the training centres. Though attendance at the Religious Instruction Course is entirely voluntary, it is rare indeed that any student stands aloof, and it may be claimed with all confidence that the teaching given not merely exerts a potent influence on their own lives but is through them a powerful factor in the spiritual development of the children of Scotland who attend our public schools.

The Spirit of the Teaching

To sum up, it may reasonably be maintained that so far as organisation, curriculum and training are concerned, the provision of facilities for religious instruction in Scottish schools is fairly adequate up to the end of the stage of primary education. The same affirmation cannot be made about the secondary schools. In many of these religious instruction is the Cinderella of an overcrowded time-table. Yet there are honourable exceptions, and the influence of the New Syllabus is steadily making a difference in fostering the custom of common worship as well as in modification of the curriculum.

The most potent factor in the problem, however, is the attitude of teachers in this vital matter. Without their genuine sympathy the best of organisation would avail little in religious education. In this respect Scotland is fortunate, for, apart from occasional instances of indifference or, more rarely, of hostility towards religious teaching, there can be no doubt of the deep interest which as a body the teachers of Scotland take in the religious life of the community. Many of them are office-bearers in their own local congregations, and the vast majority of them are Church members. Their keen appreciation of social needs and their deep sense of human solidarity combine with their own religious faith and experience to make their teaching of the Bible a vital factor for good in the lives of the rising generation, and the growing tendency towards religious unity which has characterised Scottish Church life during the present century makes easier their work of bringing up their scholars in the faith and love of Christ.

W. M. WIGHTMAN.

CHAPTER TWO

A Survey of Music and Music Teaching in the Elementary Schools of England

TO write a survey of contemporary music teaching and practice in our elementary schools is by no means a light or straightforward task, because of the many difficulties which hinder its normal development there.

Shortage of Teachers

In the first place, the supply of teachers competent to deal adequately with the art is very small compared with the number actually required. Moreover, now that music is no longer a compulsory subject in the training colleges, the tendency of many students, especially women, entering the training colleges from secondary schools is to regard singing as something they have already "done" at school, and about which they already know enough without taking an examination in it. Others, especially men, having lost touch with music after about the age of thirteen or fourteen, are for the most part reluctant to take it up again three or four years afterwards. It must be remembered, too, that the general standard of the music papers set in the Certificate Examination is notoriously exacting and definitely beyond the capacity of the average secondary scholar, so that there is little incentive to the pursuit of music in this quarter.[1] The result of all this is that efficient teachers of music are not produced in large quantities, and its teaching in our elementary schools suffers in consequence. The boys' schools are at a greater disadvantage than the girls', for it will be found that it is still the common practice in boys' secondary schools to abandon class singing as soon as they reach the third form, and it is mainly from the secondary schools that our future teachers are drawn.

Thus it matters not of what particular type an elementary school may be, for if it can boast the services of an expert musician on its staff, the musical work will usually be good—as long as the teacher remains there. Other school subjects, with perhaps the single exception of art, are not quite in the same unfortunate position. English, arithmetic, history, geography, practical subjects—and even physical training—can be "worked up" to order by any intelligent teacher, but unless the teacher of music or art is a true amateur—that is, a lover of these things—he will never communicate the *spirit* of the work to his pupils.

[1] *The School Certificate Examination*, Subject Report on Music (H.M. Stationery Office).

Advisers

In about ten of the largest towns in England, it is true, and these mostly in the North, musical Advisers have been appointed whose duty it is to organise the teaching of music and to give expert help and advice to the teachers in the locality. Admirable and indispensable as the work of these experts has proved to be, they cannot to any large extent increase the supply of music teachers in the schools, their duties being confined almost exclusively to fostering the enthusiasm of those who are already teaching music and to keeping them in touch with its latest developments.

Time Allotted

While it would be generally true to say that music, in one form or another, is now taught in every elementary school in the land, the time allotted to it varies considerably from school to school, and depends largely on the head teacher's reaction to the art. Moreover, in junior schools, where there is a class or two of the more intelligent children whose energies are being focused on the scholarship examination as a whole, and on its main requirements, arithmetic and English, there is a tendency to give them extra time for these subjects, often at the expense of music, as the day of the examination approaches.

In but few of our infants' schools is the ideal of a quarter of an hour or twenty minutes' music a day realised, and in most three periods of half an hour a week is the normal arrangement. In junior schools, generally, two periods a week are customary, while the senior schools are often content with but one. In districts where there is a musical Adviser, however, two periods are usually insisted upon.

Equipment

In the matter of equipment, i.e. pianos, song-books, music-reading books, gramophones, manuscript books, music libraries and instruments, schools in the town generally fare better than those in the country. The problem of tuning and repairing pianos in country schools is a difficult one, but a few education authorities have attempted to solve the problem by contracting with some accredited piano manufacturer to supply pianos on hire, with the proviso that he shall not only tune the instruments and keep them in repair, but also substitute a new instrument when the circumstances warrant it.

Recent Improvement in School Music

In spite of all these difficulties, inevitable in a country where the teaching of music in schools has not as yet been adequately organised, the general standard is much higher than is commonly supposed, and those who have access to our elementary schools are genuinely surprised to notice the steady improvement in musical achievement which has taken place there since the " lean years " of

the Great War. This improvement is due to a number of causes. First, perhaps, it may be traced back to the general musical renaissance of the closing years of the last century, the repercussions of which began to make themselves felt in the schools some ten or twenty years later. During those years, moreover, the Board of Education was fortunate in having Sir Arthur Somervell as its chief Inspector of Music, who, in spite of a good deal of opposition from many quarters, inaugurated a new era of music teaching in the schools, the fruits of which we are now just beginning to reap. Among the more obvious causes may be mentioned the admirable opportunities afforded to and embraced with enthusiasm by teachers in schools in the various short courses in music organised by the Board of Education and other bodies. Allusion has already been made to the pioneer work which is being done by a small body of musical Advisers; the pity is that their number is so limited—in Scotland there are between seventy and eighty of them.

For much of the improvement in the choice of songs and in their interpretation the valuable lessons derived from School Music Festivals, whether competitive or non-competitive, must be held largely responsible. It should be remembered, however, that such a wealth of first-class songs of every type would not be available for use in our schools were it not for the courage and foresight of the many music publishers who employ distinguished composers to write the songs, and then issue them at a reasonable price. The English Folk Dance Society, though primarily an adult organisation, has done much both to popularise the singing of folk-songs and to raise the standard of their performance.

The Work in the Elementary Schools

It is perhaps little realised how rich in possibilities a study like music in the elementary schools really is. In addition to the ordinary routine of singing, music-reading, ear training and musical dictation, one must consider such associated activities as the percussion band, rhythmic work of all kinds, community singing, orchestral concerts for children, concerts by children, the school orchestra, pipe-making and playing, wireless lessons, country dancing, house competitions, pianoforte classes, as well as the appreciation of music. It must not be supposed, of course, that all these can be undertaken by any one school, but when they are marshalled together in this way they certainly give a larger idea of the breadth of the subject.

Repertoire

Looking at the elementary school as it is, what do we actually find, and what is the normal standard of music prevailing there? Generally speaking, the most striking feature is the way in which teachers with no special qualification for the subject, except enthusiasm and eagerness to learn, not only face this difficult task with

courage, but often produce the most excellent results from their classes. The type of song selected is usually beyond reproach, for Folk and National Songs now form the basis of the musical repertoire in most elementary schools. Songs of the Romantic period are by no means neglected, though the English translations of them are often feeble in the extreme, and a pleasing variety of modern examples is sung. The Classical composers, however, are but poorly represented, whilst specimens of the early English school from Byrd to Purcell are seldom heard.

It must be admitted, however, that the pianoforte accompaniments are often played incorrectly even by " good pianists," which cannot but do violence to the ears of the children who presumably are being trained at least to *sing* their music correctly. The conducting of songs by teachers, too, is often meaningless and frequently inaccurate, the simplest cure for which is either to study correct methods or to let the children sing without it—which is generally far better.

Singing

In the matter of singing the standard varies, of course, from school to school, and depends solely on the ability of the teacher. It is usually accurate and tuneful. This is especially true of the infants' schools, where at least the children are taught to sing quietly. But the interpretation is often lacking in significance, chiefly because the words of the songs are not first studied with regard to their meaning and correct enunciation. In Scotland great importance is attached to the wedding of speech and song—in other words, to the close co-operation which must exist between the specialist teachers of music and English if the work of both is to produce good results ; but in England we have yet to learn this lesson.

As regards tone, in the North it is often unduly heavy, while in the South it tends to be somewhat thin and pinched ; but in many a school a good balance of tone is obtained and the result is delightful. Locality, apparently, has nothing whatever to do with good or bad singing, as has often been supposed, for some of the best can be heard in the valleys and on the plains, just as some of the worst can be found on the hilltops, nor has the North any monopoly of good singing. There is just as much nowadays in the South as in the North, if not more. As we have seen, it depends entirely upon the quality of the teaching.

Part Singing

The schools—and they are many—which attempt singing in parts usually do the work well, but in mixed schools it is still the exception to find the boys taking the upper parts, which should be their particular province. Some of the part-songs thus attempted are often too difficult for the class as a whole, and much valuable time is spent in grinding away at one or two difficult part-songs while the general repertoire of unison songs is limited considerably

thereby. On the whole it is no exaggeration to say that the standard both of the songs chosen and of their performance is higher than that of any other country in the world.

Music-reading

In the matter of music-reading, however, the general standard is much lower. For this there are several reasons, which are worth enumerating if only to show that the fault lies in ourselves, and therefore can be remedied without great difficulty. First, the start is often delayed until children reach the 11 *plus* stage, and then they find it wearisome and difficult. In the comparatively few infants' schools where it is done systematically, the children find it as easy as learning to read English, especially if the way is prepared by experience of rhythmic work and the Percussion Band. Moreover, in the junior departments, where the start is more often made, both teachers and children are frequently handicapped owing to the lack of proper equipment. One or two exercises are written up on the board once a week (as there are no music-reading books provided) which the whole class is supposed to read. What happens in actual practice is that a small minority is doing all the work, while the rest follow at an almost inappreciable distance behind. This unfortunately is the normal " method " in our schools, and it is only successful in fostering laziness and boredom in the majority of the class. It would seem that the practice of reading by small groups in each class is the best way out of the difficulty ; for if this were done the stragglers could easily be detected and brought to book.

Again, even when music-readers are provided they are often so badly graded that not more than one or two exercises can be taken, and these are sung over and over again until they are sung correctly. A more satisfactory plan would surely be to use a really well-graded book and run through a dozen at least of the exercises on the group system. It is a pity that there are not more music-reading books graded to the same degree of excellence as the many English Readers that one finds in infants' schools. It must be admitted, too, that in many schools where the children sing their songs quite beautifully, the tone of their voices while reading music is anything but pleasant ; presumably because it is not ear-marked as a " singing " lesson. Whereas, if the solfa-syllables were sung more softly in the course of music-reading lessons, they would be found to be of considerable value in forming correct vowel sounds.

As singing is one of the few school activities in which all children are capable of taking part with almost uniform success, it is much to be regretted that so few of them when they leave school seem to maintain their interest in it. At any rate, it is the common complaint of choirs and choral societies, whether urban or rural, that they cannot obtain recruits from the ranks of the young, and this may be due to the inability of the latter to read music fluently. If children on leaving school were unable to read their own language,

it is unlikely that our public libraries would be able to record year by year the wonderful increase in library membership that they do. There is no doubt that as regards practical music-making we may well ask the question, " After school—what ? "

Composition

After reading comes writing in the natural order of events, and in an increasing number of schools musical dictation forms a part of every music lesson. Regarded as the complement of music-reading, it is a most valuable aid to the training of the ear, for one cannot write down musical sounds correctly until the ear hears them correctly first. Where this is done it is quite reasonable to expect the older children, anyhow, to be able to write down any tune with which they are familiar. Indeed, in certain schools where children are encouraged to " make melodies " the ability to write them down is essential. This melody making has become fairly popular through the impetus given to it by a well-known musician in his broadcast talks to schools ; but if it merely means that the average child is expected to sit down with a pencil, a piece of music manuscript paper and a large piece of indiarubber, and then to evolve a tune out of his own consciousness, there does not seem to be much use in it, unless he is familiar with a fairly large repertoire of Folk and National Songs, and can hear what he is writing down with his inner ear. In schools where melody making is done by spontaneous vocal extemporisation and then written down, the results are likely to be of more permanent value to the child. A child's English composition is a congeries of many words and phrases such as he has heard his teachers or parents use, or read in books. There is seldom much that is definitely original about it, and the first efforts in such composition are invariably made orally. It is the same *mutatis mutandis* with musical composition, and the same rule holds good.

Musical Appreciation

This allusion to musical composition provides a suitable introduction to the subject of musical literature and the possibilities of contact with it in our elementary schools. As most schools now possess a gramophone, the record is probably the cheapest and most serviceable means for communicating the great masterpieces of music to the children. In a good many schools a special period is set apart for " musical appreciation," as it is called, in the course of which the children do hear a good deal of admirable and well-recorded music, but to what extent they actually listen to it is not easy to gauge. In the few schools where listening to orchestral works on the gramophone is rightly regarded as the climax of all the previous ear-training which has been done by the listeners, its value is undoubtedly inestimable, for the children will be more likely to carry their appreciation on into after-life. But when young children are literally dosed with music of this kind before they know

either how to listen or what to listen for, the results cannot but be pernicious.

In those schools where a good pianist or singer on the staff is available, the children are enabled to hear music at first hand, which not only quickens their interest but makes it easier for them to concentrate longer on the music that is being sung or played. There is a curious reluctance, however, on the part of the authorities to invite talented local musicians, even occasionally, to give short recitals of suitable music in the schools. The ideal way of presenting the best music—by means of concerts for children—has already been realised in London, and other large towns are gradually falling into line. It is essential, of course, that not only should the music be of impeccable quality, but the standard of performance should be of a like degree of excellence. The objects of these concerts, therefore, are :

1. To provide good music well performed ;

2. To encourage children to take up an instrument, which they are more likely to do after they have seen it played and heard its beautiful tone ;

3. To train up a generation of concert goers who will prefer to listen to music at first hand rather than to its mechanical reproduction, however excellent.

It is with this object in view that children are expected to pay for their tickets, for it is a well-known fact that everyone of whatever age values more highly that which costs something than that which is given free.

School Orchestras

In this connection some reference must be made to the growth of school orchestras in recent years. Though the title " orchestra " is rather a grandiloquent one, the large majority being usually mere violin bands, the study of a musical instrument in this way by a child cannot but be of real value from many points of view. It is unfortunate that the existence of these bands in so many schools is so transitory ; for where they depend for their success on a member of the staff or on the keenness of the head teacher, they are often compelled to disband when the one or the other leaves the district, as often happens.

On this account an increasing number of these violin bands are being organised or taken over (as the case may be) by some competing firm or agency in London, which not only provides the instruments and the music, but a teacher as well, the pupil paying a small sum per week. Work of this kind, done as it is out of school hours—though often on school premises, where the school managers or education authority allow it—is not easy to survey ; but the general impression seems to be that, not only the teachers, but the instruments as well, vary very considerably in quality. There is no doubt that in certain districts the bands do good work and often earn glowing tributes from expert adjudicators at the various musical

festivals for which they happen to enter. On the other hand, positive harm is done by incompetent teachers and inferior instruments. The whole position with regard to string work in elementary schools is by no means satisfactory at the moment, and we are far behind America in the recognition of and provision for string playing.

Pipe Bands

Quite recently, however, pioneers in this work, who have been experimenting with percussion instruments and bamboo pipes, have adapted the former for use in our infants' schools, and demonstrated how the latter can not only be played but also made for a few pence in our junior and senior schools. The Percussion Band has captured the imagination of both teachers and children. There are schools, of course, where it is regarded as a mere " stunt " ; where both children and their instruments are " dressed for the part," and the main object seems to be to make as much noise as possible. Where, however, the band is really purposeful, as it undoubtedly is in a growing number of infants' schools, the children learn to read from charts or individual parts from the very beginning, and only music of the very best type is used. As an aid to the correct reading of musical rhythm it has no rival. Interesting experiments are being carried out in some districts with a view to testing its supposed bracing effect on dull and backward children in junior, and even in senior, schools.

There is less likelihood, perhaps, of pipe making and playing being started on the wrong lines, for the Pipers' Guild which initiated and established it has no commercial axe to grind, and is honestly concerned only with the art and craft of it. The fact that the child can play a musical instrument at an early age is a joy indeed, but the joy he experiences in making his own instrument is no less real. The tone of the pipe when made is pleasingly mellow and produces none of that shrillness which is usually associated with the tin-whistle. The accurate eye- and ear-training involved in piercing the holes correctly provides a highly valuable exercise, and much may be done in the way of true musical appreciation by a judicious use of these inexpensive instruments. In a few schools these activities are combined, and music is performed which has been specially arranged for voices, Percussion Band, strings and pipes. The playing of a pipe is indeed a step towards the mastery of the clarinet or flute. Very few elementary schools can boast of anything approaching the full orchestra, merely on account of expense ; but until quite recently many Home Office Schools had their Military Band, i.e. Wood Wind and Brass in full complement. Measures of economy, however, have necessitated the dissolution of most of these.

Pianoforte

Another recent outgrowth of the class tuition idea is its application to the teaching of the Pianoforte. Until quite recently it had been

considered that of all musical instruments this was the one for which individual tuition was essential, but there were those who felt that many of the poorer children were being deprived of the opportunity of having their vocation tested owing to lack of means. It was resolved, therefore, to test the possibilities of teaching the elementary stages of pianoforte technique in class by means of cardboard models of the keyboard of a pianoforte, in the hope that some of the pupils, at any rate, would become sufficiently interested in and expert at their studies to want to learn at the keyboard itself. Already the plan has been successfully worked in a few schools and there is every reason to believe that the system will develop into a means of inducing more children to study the instrument, in which there has been a marked decline in interest during the last few years.

Non-competitive Festivals

Further opportunity for the exhibition of class work of this kind has recently been afforded by the establishment of non-competitive Festivals in various parts of the country. This type differs from the old-established competitive Festivals in two particulars. It is organised almost exclusively by the teachers themselves, and criticisms, where necessary, are made in their presence alone—in the absence both of children and their parents. In the morning and afternoon each school presents a list of four or more songs chosen from a list issued by the Committee, from which the Director of the Festival selects two different songs for each school to sing. In this way a very large repertoire is covered, for it will be found that, as a general rule, the same song is scarcely ever heard more than once during the session, and the benefit to the large audience of children and teachers assembled is proportionately great. After this the Director usually says a few words of encouragement to the children (for the faults, if any there be, are not theirs) at the end of the classes or at the end of the session. Later in the day he conducts a rehearsal of the songs which the children have prepared for the mass concert to be held in the evening; and no school may enter the Festival unless it undertakes to learn these correctly. This is followed by an informal tea and conference, at which the Director will record quite frankly *in camera*, for the benefit of the teachers present, his impressions of the Festival. The day concludes with the concert, which invariably draws a crowded house, so that there is seldom any financial anxiety on the part of the promoters.

There is no doubt that by means of these Festivals, which are attended by 70 or 80 per cent. of the schools in the neighbourhood where they are held, the *general level* of musical achievement is being raised considerably from year to year, as the teachers and children learn much from hearing the work that is being done in neighbouring schools. Moreover, schools are encouraged to enter in classes rather than in choirs, so that at the Festival they will be singing in their normal units and a better idea of the normal standard

of the singing in each school can in this way be obtained. It is the class teacher who needs help even more than the music specialist, at any rate as things are at present constituted.

Folk Dancing

But to return, finally, to the school itself, it is found that one of the most popular musical activities is the Folk Dance—essentially musical, because in this form of dance the music is its obvious inspiration and is therefore inseparable from it. In some schools there exists the mistaken notion that it is merely a form of physical training, and the execution of the dance often suffers in consequence. Country dancing is now taken in most junior schools, and in nearly all senior girls' schools. It is regrettable, however, that boys seem to renounce it on promotion to the senior schools, for neither the posture nor the carriage of our youth at the present is such that they can afford to dispense with so admirable an aid to its improvement. In many senior boys' schools, on the other hand, especially in the North, both Sword and Morris Dances are done.

Rhythmic Work

Akin to this, and in many ways more important, because it can be started in the infants' school and carried right on and through school life, is rhythmic work. Hitherto the study of Eurhythmics had been confined to the teacher of special musical ability, but now it has been adapted to suit the requirements of the children in our elementary schools and already has proved to be excellent for teaching the technique of music through sense impressions. But not only does it help children to feel the pulse values of music " in their bones," it also enables them to realise the character and mood of the music they hear. Like country dancing it claims to add grace and dignity to the bearing of the child. The use of this reformed method is as yet in its infancy, but there is every reason to believe that it is capable of giving mental as well as physical poise and balance to those who engage in it. Its possibilities for the retarded child have scarcely as yet begun to be explored.

House Competitions

The House Competition in music has for many years been one of the distinctive features of our public schools, but it is only since the Hadow reorganisation scheme came into being that it has become feasible in our elementary schools. Most of these have now adopted this House system in their senior departments, with the result that House Competitions in Singing are becoming increasingly popular with these older pupils. In rare instances a pleasing variety of such an excellent lesson in musical appreciation is provided by the visit of a neighbouring school choir, which perhaps has won its laurels at some important competitive Festival. Such a choir will give a selection of well-chosen songs to the

assembled scholars, and invite their co-operation in the singing of a few folk songs and shanties at the close. It is rather difficult to understand why this practice is not much more general than it is. No harm need be done, and much benefit may be derived, from such an occasion.

Conclusion—after School

The field of music is a very wide one, and it cannot be expected that every school or even the majority of schools will find time or opportunity to explore every corner of it. None the less, in every school some part of the field is being explored, and if tares are found in many parts of it, there is also plenty of good grain.

This brief survey of music in our elementary schools leads us to express the opinion that the musical outlook is bright and promising, and the next problem which has to be faced is: "After school—what?" For if it is true that work is to become more and more mechanised and that opportunities for leisure will increase rather than diminish, it will be as well to train our children how to use this leisure in the most fruitful way; and of all the subjects in the school curriculum, is there any quite so universally practical or corporately inspiring as the study and practice of music?

CYRIL WINN.

The Dominions

CHAPTER ONE

THE UNIVERSITIES OF THE UNION OF SOUTH AFRICA

I. Extent

THE evolution of University institutions in South Africa has been determined by two main factors: (*a*) distance and (*b*) cultural distinctiveness. In the fact that we are an European population of a bare 1,800,000, living scattered in small nuclei over an area of about half-a-million square miles, i.e. more than four times the size of the British Isles—and in the fact that the South African people is composed of two virile white nationalities which, though geographically intermingled, cling tenaciously to their respective rights of language, etc.—is to be found an explanation of the phenomenon that we are being served by no less than nine institutions of university rank. Their size can be gauged from the statistics on the opposite page, which are for 1932.

There is no doubt that such a multiplication of university institutions to serve a small population is not only costly (a very serious factor in these days) but, what is worse, it also leads to dissipation of resources in teaching and research. These are, it seems, the inevitable penalties which a democratic people in a pioneer country has to pay. We shall return to this point later.

II. Historical Development

Early Beginnings

The small European settlement founded by Jan van Riebeeck in 1652 at the Cape, merely as a tavern of the ocean to supply the Dutch East India Company's ships with fresh provisions, grew in the course of the following two centuries into a community with independent cultural as well as political and economic aspirations. Its population consisted of colonists from Holland, France and Germany, and after 1820 there arrived also settlers from England and Scotland—all countries where learning was highly prized. Pioneers from these lands did not easily leave their heritage of spiritual culture behind them. Moreover, as the community developed and became more differentiated, the need arose for men trained in the professions. Besides, they had a social and cultural prestige to maintain in the presence of a large native population.

It is, therefore, not unnatural that sooner or later these pioneer parents should have desired higher education for their children. Those who could afford it sent their boys to Europe for advanced

INSTITUTION	STUDENTS			STAFF				CURRENT ANNUAL EXPENDITURE
				FULL-TIME		PART-TIME		
	FULL-TIME	PART-TIME	TOTAL	PROFESSORS	LECTURERS, ETC.[1]	PROFESSORS AND LECTURERS, ETC.	TOTAL	
								£
1. University of Capetown	1,506	369	1,875	43	90	61	194	199,305
2. University of Stellenbosch[2]	965	85	1,050	43	66	—	109	80,437
3. University of Witwatersrand	1,399	383	1,782	30	53	82	165	175,939
4. University of Pretoria[3]	474	411	885	37	41	43	121	61,704
5. University of South Africa: Constituent Colleges:								
(a) Rhodes (at Grahamstown)	407	27	434	13	24	5	42	47,953
(b) Huguenot (at Wellington)	86	6	92	7	7	1	15	10,360
(c) Grey (at Bloemfontein)	244	89	333	12	16	9	37	36,085
(d) Natal (at Pietermaritzburg and Durban)	417	220	637	15	17	16	49	25,930
(e) Potchefstroom	223	3	226	10	6	4	20	17,485
Total	5,721	1,593	7,314	210	321	221	752	£655,198

[1] About half of these are senior lecturers, one-fourth lecturers, and one-fourth assistants, demonstrators, etc.

[2] Including 124 students taught by 27 part-time and full-time staff in Department of Agriculture.

[3] Including 121 students taught by 43 part-time and full-time staff in Department of Agriculture and Veterinary Science.

study. This meant, however, in those days a prolonged and perilous voyage of 6,000 miles, and only very few could afford it.

So, no doubt, it came about that the South African College was founded as a proprietary institution at Capetown in 1829. It received its first financial aid from the Government in 1834, and in 1837 it was duly incorporated as a College. Judged by modern standards, the character of its work during the early stages was not much above that of an ordinary high school. In fact, it was not until 1900 that it rid itself of its matriculation class and became a proper University College, confining itself solely to post-matriculation work. Situated at the centre of the cultural and industrial life of the Cape Colony, this institution grew rapidly, and in 1918 it blossomed forth as the University of Capetown.

In the meantime another school of higher learning was started about 35 miles away at Stellenbosch. It was founded originally in 1866 as a Gymnasium. In 1881 it was incorporated as Stellenbosch College, and in 1887, with the jubilee of Queen Victoria, was christened the Victoria College. The circumstance that it was

situated in a country town and that it was (as a student body) closely associated with the Theological Seminary which was founded at Stellenbosch in 1859 to train ministers for the Dutch Reformed Church, probably accounted for the fact that Stellenbosch has almost from the beginning catered more particularly for the needs of the rural population which was in those days almost exclusively Afrikaans-speaking. Later, this institution became a potent factor in giving articulate expression to Afrikaans culture. Its contribution was therefore so distinct and definite that Stellenbosch refused consistently to be drawn into the " merger " scheme of a big National University which Cecil Rhodes had hoped to establish at Capetown.

The National University Ideal

Speaking before the congress of the Afrikander Bond at Kimberley on March 30th, 1891, Rhodes made that memorable speech in which he stated his intention of founding a teaching, residential University at Capetown which would serve as a great nationalising force in South Africa and within whose walls the students from all parts of the country, both English and Dutch, would be bound together to form a single, united nation, possessing common ideals and a common culture. " I feel," he said, " that should a teaching University such as I have indicated be established . . . the young men who will attend it will make the Union of South Africa in the future. Nothing will overcome the associations and aspirations they will form under the shadow of Table Mountain."

There were, however, many obstacles in the way. Not only was there the opposition from the Dutch-speaking element and from Stellenbosch, but there were the local jealousies of the other little colleges which had sprung up in the meantime—particularly in the Eastern Province. These acted as centrifugal forces and retarded negotiations towards the materialisation of Rhodes' dream of a great National Teaching University at Groote Schuur, Rhodes' estate at Capetown. Rhodes was, however, a man not easily daunted by obstacles. He had the money and could mould matters at his will. Eventually everything was arranged, and it looked very much as though the National University would become an accomplished fact. Indeed, Rhodes actually told Sir Thomas Fuller, who was at the time on the point of leaving South Africa for England, " You will find the foundations laid if you are back by January next year."

It was not to be, however. Rhodes' sanguine prophecy was never fulfilled, for, six months after it was made, on December 29th, 1895, the Jameson Raid took place. War clouds were soon gathering thick on the horizon, and as Rhodes' attention was occupied with the Anglo-Boer War which was eventually precipitated, the question of a National Teaching University was thrust into the background. Indeed, it was not until after the cessation of hostilities in 1902 that it could be taken up again. But in that

very year Rhodes died. It came then as a great disappointment to many people when it was found that Rhodes, apparently disgusted with the opposition which his University ideal had excited, had definitely given up his former idea of setting up a National Teaching University at Groote Schuur and had in his will diverted the money intended for this purpose into another channel—the establishment of the Rhodes Scholarship scheme.

This brief account illustrates rather well the saying that South Africa is the graveyard of noble schemes as well as of great reputations. Powerful forces seem to be at work before which the efforts of our greatest statesmen are impotent. Repeatedly our history has shown how, with almost fatalistic ruthlessness, these forces crush man's best-conceived schemes like so many soap-bubbles. Yet this account also shows how, out of the failure of one scheme, as a result of these very fissiparous tendencies in our national life, there was born another scheme of wider significance, the institution of the Rhodes Scholarships, whose uniting influence reaches even beyond the bounds of the British Empire.

The Examination Craze

The motive which actuated Cecil Rhodes in trying to found a National Teaching University was in the first instance political, to use it as an instrument with which to build up a united South African nation. There was, however, another motive at work. This was educational and was entertained chiefly by the stronger University Colleges. These institutions were chafing under the yoke of examinations imposed upon them externally by the University of the Cape of Good Hope, which was merely an examining and degree-granting body established in 1873 on the model of the University of London.

Its prototype was the Board of Examiners which was instituted at the Cape in 1858 in order to conduct examinations and issue diplomas of proficiency in natural science, literature, philosophy, law, engineering, surveying, etc. The Act of 1858 stipulated that the qualifications for certificates in science and literature must, as far as conditions in the Colony permitted, be equal to the qualifications for similar degrees in the United Kingdom. Under the stimulating influence of Sir George Grey, Governor at the Cape at the time, there was in the fifties a considerable outcrop of colleges. Some of these did post-matriculation work, but most of them were never much more than high schools. They were mostly private or denominational institutions, beyond the control of the State, yet withal performing a public function. It became, therefore, necessary to have some external body to lay down and maintain standards which would be recognised for professional purposes within South Africa and generally also overseas. It was to meet this demand that the Board of Examiners was originally created. As the number of candidates increased, however, it was superseded in 1873 by the University of the Cape of Good Hope. In the next year the

Higher Education Act was passed which instituted a regular system of State grants to the various colleges. State aid also brought State inspection in its train. This was greatly resented by the colleges and afterwards discontinued. At that time there were in existence the following institutions (the foundation date is inserted in brackets): the South African College, Capetown (1829); the Victoria College, Stellenbosch (1866); the Diocesan College, Rondebosch (1848), whose collegiate section was absorbed by the South African College in 1911; the Grey Institute, Port Elizabeth (1856), never much more than a high school; St. Andrew's, Grahamstown (1856), which became the Rhodes University College in 1904 as a result of the generous gifts of the Rhodes Trustees and the De Beers Company, who subscribed £50,000 and £5,000 respectively; Graaff Reinet College (1860), never more than a high school; and the Huguenot Seminary, Wellington (1874), founded as a Women's College by the Rev. Andrew Murray on the pattern of the Mount Holyoke College in America, recognised as a college in 1898 and incorporated by Act of Parliament in 1907.

These colleges did the teaching while the University of Cape of Good Hope did the examining. The most indispensable qualification of its examiners was that they should know nothing about the candidates beyond their powers of assimilation. A college professor who taught a particular subject was expressly prohibited by regulation from acting as examiner in that subject—no doubt with a view to preventing corruption or partiality. The situation, however, was absurd, because in South Africa, where there were few experts in a scholastic subject outside those teaching it, it meant that the best men were debarred from acting as examiners and that the examinations had often to be conducted by inferior or even incompetent men.

What was even worse, the general public soon came to regard the University in the light of an examination factory and based its estimate of the value of the work done by the different colleges on their annual pass lists, much in the same way as most people nowadays still judge the school on its matriculation successes. This point of view led to the exaltation of the examination as the be-all and end-all of education, with the inevitable consequence that the colleges tended to concentrate on obtaining " results " rather than on giving their students a sound liberal education. The general effect of this system was demoralising in the extreme.

The fact that there was in connection with this University no Senate on which the various colleges could be represented—a suggestion which was made in vain several times—caused a strained relationship between the University and the colleges. At times we find that the colleges complained bitterly that their teaching work was continually being cramped by the external imposition of syllabuses and standards, over which they had no control, but to which they were slavishly bound to conform.

This state of affairs continued until 1918 when Capetown and Stellenbosch realised their ambition and became independent *teaching* universities. The rest of the colleges were united under the University of South Africa, a federal institution with a Senate on which the staffs of the colleges were represented.

We have given some space to this point with a view to showing how a system of external examinations operating for sixty years has been responsible for the absurd predominance of the examination craze in South African education. The public is still obsessed by it. Nor have the universities entirely outgrown this deleterious tradition. Too often do we find even to-day that the spirit of research is stifled by the tyranny of teaching and examining—teaching (lecturing) being often little more than cramming students full of " notes " which are disgorged by them in the examination-room.

University Development in the North

Thus far we have looked only at university education as it originated and developed in the Cape Colony, the mother province. To be sure, there were within its own boundaries alone enough disruptive forces continually operative to hamper healthy growth. In order to understand, however, the very complicated situation which faced those who tackled the university question from a national standpoint after the formation of Union in 1910—when the divergent interests of the northern provinces had to be taken into account as well—it will be necessary to give a brief account also of the growth of higher education in the other three provinces, Orange Free State, Transvaal and Natal.

In 1855 Sir George Grey with far-sighted generosity founded the Grey College at Bloemfontein, Orange Free State. In the early days it did purely high-school work, preparing candidates for the matriculation examination of the University of the Cape of Good Hope. In 1907 the post-matriculation section was separated from what is now known as the Grey College school. To-day it is one of the constituent colleges of the University of South Africa.

This institution attracted some students from the northern provinces, but at the beginning most parents of the Transvaal, Natal and even of the Orange Free State sent their children for advanced study either to the South African College at Capetown or to the Victoria College at Stellenbosch.

The Transvaal Republic was, however, scholastically strongly under Hollander influence and there was evidence of an anti-Cape-Afrikander feeling in Transvaal educational circles. The Cape-trained man became a serious competitor of the imported Hollander teacher and civil servant. It is, therefore, not unnatural that we find from the time of President Burgess (1874) onwards repeated attempts to establish in the north an institution for higher education based on Continental (i.e. Hollander) lines—partly in order to offset the effects of Cape-Afrikander education run more or less on

English-Scottish lines. It was not until 1893, however, that this idea materialised in the form of a State Gymnasium in Pretoria. It consisted of two distinct departments: (*a*) the Gymnasium, where a strictly Arts course was given with a predominance of classics, and (*b*) the *Hogerburgerschool*, which gave more professional and technical training. This latter, " modern " side was instituted in 1895. The course was a five-year one and prepared students on the classical side for entrance at the Netherlands State Universities, and on the technical side for admission to the Polytechnic School at Delft.

This Gymnasium did good work and was probably a much better model to build on for the future with a view to meeting South Africa's peculiar needs than the colleges at the Cape. These latter institutions steered only in one direction, the purely academic ; and while we do not wish to belittle their contribution in that direction, we feel that their one-sidedness was partly responsible for the late development of technical and vocational training in South Africa, a handicap from which the country has even to this day not yet recovered. In those days there was a new country to be opened up. Railways and bridges had to be built. The mines had to be worked. For this work all the trained men had to be imported. One of the mining directors as early as 1891 urged the necessity of technical education to meet the needs of the rapidly growing mining industry. " There are too many mining quacks," he said. " Whenever the De Beers' Company want a good man they have to send home for him, whereas such a man ought to be obtained here." In February, 1897, a School of Mines was opened which took over largely the professional side of the Gymnasium work.

The Boer War, however, brought all this promising work to an abrupt end. In 1899, the last year of its existence, the staff of the Gymnasium consisted of 14 Professors and Lecturers and 116 students. That the education provided at this institution was of a good quality may be gathered from the following, written in the London *Times* (November 13th, 1905) by Mr. Fabian Ware, who was Director of Education in the Transvaal at the time : " Before the war the Dutch were instinctively developing their secondary education on lines which, in respect of efficiency of instruction, English people will apparently only be persuaded to follow after much experiment and failure. As far as the standard and methods of instruction are concerned, the Gymnasium in Pretoria was, both in organisation and staff, probably unequalled in South Africa."

Though the war swept all this away yet the idea of a university in the north remained alive. Whereas the universities in the south had started with a strong academic core and at later stages acquired, by way of external accretion, professional and technical departments such as engineering, medicine, agriculture and commerce, we find in the north just the opposite happening. There, faced with the immediate need to provide the mines with technically

trained men, it is not unnatural that the first post-Boer War institution of higher education was termed the School of Mines. This institution was transferred to Johannesburg shortly after the Boer War from Kimberley where a small start had already been made. This South African School of Mines and Technology, as it was afterwards called, starting with a technical core, gradually acquired departments in arts and science, until in 1920 it became the Johannesburg University College as a preparatory step to blossoming forth in 1922 as the University of the Witwatersrand. Starting respectively at different ends, the one at the academic and the other at the technical, two institutions (of which the Universities of Capetown and Witwatersrand are types) have gradually converged towards the same external pattern. I say external, because as regards their inward intent there is noticeable to the close observer a different atmosphere reflecting the different original traditions of these two institutions.

Less than 40 miles away from Johannesburg lies Pretoria. In 1910, when it became the administrative capital of the Union, we find that the university classes in arts, science and law which had since 1908 been established under the control of the Johannesburg institution, became independent under the name of the Transvaal University College. Like the other university colleges in South Africa, it was one of the constituent colleges of the University of the Cape of Good Hope and later of the University of South Africa. In 1930, however, it also received a higher status as an independent institution under the name of the University of Pretoria. This institution has a strong Faculty of Agriculture (established 1917) and achieved its independence as a separate university chiefly on the ground that it professed to cater for the needs of the rural (i.e. Afrikaans-speaking) population of the north.

Mention must also be made of a small University College, that of Potchefstroom, situated in the country about 75 miles south of Johannesburg. It is of interest in so far as it is the only sectarian or semi-religious institution of higher education in South Africa, though religious freedom is guaranteed by Act of Parliament in all these institutions, including Potchefstroom. It developed out of the Literary Department of the *Theologiese School van de Gereformeerde Kerk*, founded at Burghersdorp in 1869 and transferred to Potchefstroom in 1905. In 1921 this Literary Department became the Potchefstroom University College, and in the same year it was incorporated as a constituent college of the University of South Africa.

Natal

Natal was the last of the provinces to found an institution of higher education of its own. It sent its children either to the Cape or to England for university training. In 1905 the Natal Technical Education Commission drew up a report in which it recommended the formation of a University College at Pietermaritzburg. Nothing

came of this proposal at the time, but a few years later, on the very eve of Union, the Natal Government decided to rush through a measure which would give Natal its own University College and thus enable it to enter the Union in 1910 on something like equal terms with the other States as regards the facilities it possessed for higher education. Accordingly, on December 11th, 1909, an Act of Incorporation was passed by which the Pietermaritzburg University College was duly founded at Pietermaritzburg. In 1916 this institution, under the new title of the Natal University College, became one of the constituent colleges of the University of South Africa.

Since 1931 this University College has been operating in two sections 75 miles apart, one at Pietermaritzburg where the general arts and science courses are given, and one at Howard College, Durban, where the faculties of engineering, fine arts and commerce are housed. Durban has for some time been cherishing hopes of having a big urban university of her own, like the other cities of South Africa, and this may be the first step in that direction. It was made possible by the generosity of Mr. T. B. Davis, who gave the building in memory of his son, Howard, who was killed in the Great War. At present these two sections are under one principal and under the financial and academic control of the Natal University College Council and Senate.

Solution of the University Question

In 1910, when the Union of South Africa was formed, higher education became a matter for Union control, whilst education other than higher was left with the four provincial authorities. The need arose, therefore, to create out of all the above-mentioned institutions a university system for South Africa. The old examining body, the University of the Cape of Good Hope, had already outlived its usefulness and there was a general desire amongst the colleges to be relieved of this yoke and to do the examining as well as the teaching themselves. In short, each institution, backed by political, cultural and local interests, aspired to become a single-college university. These centrifugal tendencies were countered by the idea of a single National University, either full-fledged or confined only to post-graduate work. We saw how Rhodes gave up supporting this idea, yet there were the Beit-Wernher Bequests which, together with local support, amounted to over half a million pounds ready to finance some similar national undertaking. The Minister of Education embodied a scheme similar to this in a Bill before Parliament. It received, however, but scant support and was withdrawn.

There were the rival claims of the north and the south in respect of the carrying out of this grand idea, and there were the cultural claims of the two sections of the population which refused to be merged in one national university whether purely post-graduate or not. These were complications which rendered the University

question nearly an insoluble one. It would take us too far afield to outline the various " solutions " which were proposed by various Commissions which sat on this question, or the attempts by means of legislation to arrive at an equitable scheme. In the meantime the Great War had broken out and it was difficult to get the country's attention concentrated on this problem. The Laurence Commission, which was appointed in 1913, did useful work in marshalling the facts. It proposed as a solution two federal universities, one in the south embracing the colleges in the Cape Province and a similar one in the north—colleges, like Grey, having the option as to which of the two they would join. This scheme fell through chiefly because of disagreement as to the apportionment of the Beit-Wernher bequests between the different institutions. Negotiations in which the South African College played a prominent part were, however, continued and at length a solution was arrived at. This was embodied in the three University Acts of 1916 which provided for the establishment of three Universities :

(*a*) *The University of Capetown*, with which was incorporated the South African College and which was to be endowed with the Beit-Wernher Bequest. It was to have its seat at Groote Schuur. The new buildings on this site were completed in 1932 at a cost of over £1,350,000.

(*b*) *The University of Stellenbosch*, with which was incorporated the Victoria College. It was to have its seat at Stellenbosch. The fact that this institution had just a short time before received a bequest of £100,000 from Mr. Jan Marais was an important factor in supporting the claim of this college to aspire to full university rank.

(*c*) A Federal University, to be called *The University of South Africa*, of which Rhodes University College, Huguenot University College, Grey University College, Natal University College, Transvaal University College, and the South African School of Mines were to be constituent colleges. This Federal University was to have its seat in Pretoria.

These universities were not, however, to come into actual existence until the " appointed day," April 2nd, 1918, because in the meantime a great deal of preliminary organisation had to be done. A University Statutes Commission was appointed in the meantime to do the preparatory work of framing regulations, courses, etc.

The 1916 University Act also made provision for the establishment of the following joint bodies :

(*a*) *The Joint Matriculation Board.* This body to-day consists of representatives of the five universities (South Africa, Capetown, Stellenbosch, Witwatersrand, and Pretoria), the Provincial and Union Education Departments, and teachers of public and private secondary schools. It is charged with the control and conduct of the matriculation examination. The Cape and Transvaal Education Departments conduct their own

secondary school examinations. These are, however, subject to the moderation of the Joint Matriculation Board in so far as these certificates are used for University entrance. The constitution of this body was one of the thorniest questions to decide. In respect of its influence over higher and other education it is probably the most powerful educational body in South Africa. The fact also that the leading men working in diverse fields of education come together at regular intervals from all parts of the country makes these meetings of more than ordinary significance. They are, to use an Afrikaans expression, educational *nagmaals*.

(*b*) *The Joint Committee for Professional Examinations*. This Committee controls and conducts the examinations in law (other than degree examinations) and surveying, and the final examination for patent agents.

(*c*) *The Vice-Chancellors' Committee*. This Committee consists of the Vice-Chancellors of the five Universities and is charged with the regulation of matters common to the five Universities, the Joint Matriculation Board and the Joint Committee for Professional examinations, or any of them.

The Secretary to each of the first two bodies is the Registrar of the University of South Africa and of the last is the Registrar of the University of Capetown.

Subsequent to the passing of these University Acts, two more universities were established, as we saw above. In 1922 the College at Johannesburg established its claim as an independent teaching university and became the University of Witwatersrand, and in 1930 the Transvaal University College became the University of Pretoria.

The Growing Dualism

Separatist tendencies due to the fact that each of the two white races, English and Dutch, feels that it owes its first and warmest allegiance to its own language, traditions and culture, were already (as we saw above) complicating the university situation before the above-mentioned solution was arrived at. Since that time, however, language has become a very decisive factor in shaping university development. This is due largely to the rapid growth of Afrikaans literature during the last few decades, the recognition of that language as one of the two official languages, and its almost exclusive use as a medium of instruction in half the schools of the Union. This has resulted in an articulate consciousness of cultural distinctiveness and worth in regard to Afrikaans. Gradually university institutions have drifted into two camps differentiated chiefly by the medium of instruction predominantly used: English on the one hand and Afrikaans on the other. In fact, it is possible to pair off eight of the nine university institutions to-day according as they stand primarily for the English or the Afrikaans tradition respec-

tively. In the south we have Capetown and Stellenbosch, two universities only about an hour's run by train apart. A thousand miles away in the north we have Witwatersrand and Pretoria, also close together, one English and one Afrikaans. Next, Rhodes University College, situated in the Eastern Province amongst a predominately English community, may be paired off with Grey University College in the Orange Free State, serving an almost homogeneously Afrikaans-speaking province. And lastly, there is the extreme English section represented by the Natal University College, which may be paired off with the equally extreme Afrikaans institution at Potchefstroom. The ninth, Huguenot University College, is very small. It is mainly for women and stands for a tradition which is an Anglo-American mixture.

Disintegrating Tendencies

In a way this dualism, due to an insistence on cultural distinctiveness in university life, is to be deplored, because the people of the two white races do not live separately as they do in Canada but intermarry and intermingle constantly in ordinary social, commercial, industrial and political life. Yet, as I said at the beginning, this educational dualism is probably inevitable in a democracy where each section is free to insist on what it considers its rights.

In spite of rapid communications, mere distance will also yet tell its tale in shaping future university development in South Africa, because members of the Senate of the University of South Africa have to travel as much as a thousand miles to attend its meetings. There is, therefore, no telling whether, if the necessary money and students are forthcoming, other colleges may not in course of time break away and set up house for themselves. Now that the Government's policy has veered round towards a definite strengthening of the provinces as against the Union, it is possible that provincialism will once more become a strong factor in shaping university policy in the future, most likely in the direction of the total disintegration of the University of South Africa and the creation of small independent teaching universities all over the place.

Most of these could, by the very nature of our circumstances, never be much more than glorified high schools parading under the name of university institutions. If it is the expressed purpose of South Africa to provide continued secondary education in this way and to bring it within easy geographic reach of all, then I do not suppose there can be much objection. But to dub these institutions universities will be to do violence not only to the generally accepted meaning of the term, but also to the spirit of true learning which can flourish only where there is proper concentration of effort.

So much for the historical factors which have shaped South African university policy in general. We shall have occasion to

refer to some of these again when we come to deal with the more inward and specific aspects of university education. This we propose to do seriatim under the following main heads: Administration, Finance, the Student Body, the Teaching Body, Courses of Study, the Bilingual Medium Question, and the Aims and Functions of the South African University.

III. Administration

The head of the university is the Chancellor. In the case of the Universities of Capetown and Johannesburg this personage is usually a member of the Royal family. In the case of Stellenbosch and Pretoria he is usually a prominent Afrikaans-speaking South African. In addition, Capetown has a Visitor who is His Excellency the Governor-General. The chief academic officer is the Principal (as he is called in Capetown and Johannesburg) or Rector (Pretoria) or Chairman of Senate (Stellenbosch). The governing body is the Council, consisting of the Principal *ex officio*, and representatives of the Government, Convocation, the Senate, and the local bodies which contribute financially.

The control and general management of the discipline and instruction within the University is in the hands of the Senate. This consists generally of the Principal, the professors, two members elected by the Council, and a few assessor members representing the lecturers.

The above applies to the four teaching universities. The administration of the Federal University is slightly different. The government of the University of South Africa is vested in a Council which consists of eight members appointed by the Government, four elected by Convocation, one appointed by the Council, and one by the Senate of each constituent college, with the proviso that any Government or Administration outside the Union which contributes a certain fixed sum to the general maintenance fund of the University may also appoint a representative to the Council. The general control of the examinations, the drawing up of curricula and syllabuses, and the general responsibility for academic affairs of the University as a whole are in the hands of a University Senate, which consists of the heads of recognised departments of study at the constituent colleges.

Each constituent college has a College Council responsible for the general administration of the College, and a College Senate, consisting mainly or entirely of professors on the staff, which controls academic matters and is responsible for the general discipline and supervision of the students.

IV. Finance

When the new university system started to operate in 1918, State aid was given roughly on the following basis: £3 to every £1

spent by the university on salaries of staff and £1 for every £1 spent on other current expenditure. As regards loan charges, a discrimination was made between the southern and the northern universities. This basis did not prove satisfactory, and in 1922 a different arrangement was arrived at. Instead of the Government grant depending directly on the expenditure of a university or college, it was in future to be based on the total revenue raised by the university or college. A slightly more liberal ratio (£3 to £1) obtained in respect of revenue raised through fees than in respect of revenue raised from other sources (£2 to £1). The total contribution by the State was not to exceed a certain limit. This system worked fairly satisfactorily for a number of years. The University Commission appointed in 1927 criticised this basis, however, on the ground that " if it is the duty of the State to provide education it cannot make its aid dependent upon and proportionate to other income as it now does. It may grant too little or too much." In other words, the weakness of the system lay in the fact that, while the Government grant to a specific institution was made dependent on the total annual revenue of the institution, there was the restriction that the grant must not exceed seven-tenths of the expenditure for certain purposes during the year. This may on the one hand lead to checking private munificence, while on the other it may encourage unnecessary expenditure on the part of an institution which has as its sole object the acquisition of the full benefit to be derived under the seven-tenths provision.

This basis of subsidy, moreover, placed the Minister of Education in the difficult position that he was unable to give any consideration to a fall in the financial resources of the State (and the depression caused a considerable fall) when assessing these university grants. It was found, for example, that institutions in close proximity duplicated expensive faculties while the general taxpayer had to foot the bill, or a considerable proportion of it. As a consequence Act No. 27 of 1931 was passed. This gives the Minister a much larger control over the expenditure of the universities than before.

> " The provisions of the Act boil down to this : if any institution contributes out of its own funds less than fifty per cent. towards its current annual expenditure, it must submit its budget of revenue and expenditure for the coming year to the Minister for approval. In him is vested the power to disallow any items of expenditure, provided he clearly states his reasons for so doing before Parliament. Further, after such approval has been gained, the institution must stick to its budget on broad lines. Thus a saving on one class of expenditure may not be used on another class of expenditure without first obtaining the Minister's consent. If, however, an institution is able to find more than fifty per cent. of the cost out of its own funds for two years running, it shall not be subject to the above-mentioned control of its budget by the Minister."[1]

As will be seen from the table on page 756 (for 1932), only Capetown and Witwatersrand Universities and Rhodes and Natal

[1] *The Year Book of Education*, 1932, page 642.

University Colleges received less than 50 per cent. of their revenue from the Government grant. The first three did so in 1931 also, and will therefore, in 1933, be masters in their own house financially.

INSTITUTION	PERCENTAGE OF COST MET BY			TOTAL COST
	GOVERNMENT GRANT	STUDENTS' FEES	OTHER SOURCES	
Universities :	%	%	%	£
Capetown	40·08	30·83	29·09	199,305
Stellenbosch	52·33	28·55	19·12	80,437
Witwatersrand	41·68	36·25	22·07	175,939
Pretoria	59·47	29·94	10·59	61,704
Total	44·84	32·21	22·95	517,385
University Colleges :				
Rhodes	42·84	27·22	29·94	47,953
Huguenot	62·17	17·64	20·19	10,333
Natal	44·75	37·39	17·86	36,085
Grey	63·32	26·25	10·43	25,930
Potchefstroom	54·05	24·05	21·90	17,485
Total University of S.A.	50·07	28·58	21·35	137,813
Grand Total	45·49	31·45	22·61	655,198

While the previous subsidy arrangements left the State in a somewhat uncertain position as to its commitments from one year to the other, the present arrangement places the university institutions in such a position that they are not assured of sufficient financial support for a number of years to enable them to embark upon developments. We find, therefore, that in July 1933 a Committee of Enquiry has been appointed by the Minister of Education under the chairmanship of Sir John Adamson

> " to enquire into, report upon and make recommendations regarding the provision of State subsidies to Universities, University Colleges . . . with a view to devising, if possible, a system of subsidy under which, while State control of public expenditure would be duly safeguarded, such institutions might count on a greater degree of stability and continuity in the development of their educational policy over a number of years."

In his last Annual Report (1931) the Union Secretary for Education raised a significant question in regard to the future development of university finance in words which have already been quoted in Part I, Section I, Chapter I, of this volume (page 18).

The table on page 757 shows the great differences in unit costs for 1932 amongst the various university institutions.

On an average it costs £109 per annum to educate a university

student, of which the State contributes £50, the student (in fees) £34, and the institution £25 from other sources, e.g. donations, etc.[1]

INSTITUTION	GOVERNMENT GRANT PER STUDENT	FEES COLLECTED PER STUDENT	OTHER FUNDS PER STUDENT	TOTAL COST PER STUDENT
Universities :	£	£	£	£
Capetown . .	51·24	39·41	37·19	127·84
Stellenbosch .	48·72	26·58	17·80	83·10
Witwatersrand .	48·22	41·93	25·52	115·67
Pretoria . .	73·39	36·95	13·07	123·41
Total . .	52·21	37·50	26·71	116·42
University Colleges :				
Rhodes . .	49·86	31·69	34·84	116·69
Huguenot . .	73·19	20·77	23·76	117·72
Natal . .	32·69	27·31	13·05	73·05
Grey . . .	50·83	21·08	8·36	80·27
Potchefstroom .	42·19	18·78	17·09	78·06
Total University of S.A. .	44·77	25·56	19·10	89·43
Grand Total .	50·29	34·43	24·75	109·47

The amount of the Government grant has been considerably reduced during the last few years. In 1930 it was £386,584; in 1931 £344,461 and in 1932 £301,011; and the cost per student has also decreased, owing to the decrease in Government subsidy and the consequent reduction in salaries, and to the concomitant increase in student enrolment. The economic depression during the last few years drove into the universities many students who would otherwise have been in employment.

V. The Student Body

Geographical Origin and Distribution of Students

The first question as regards the student body on which we have collected data is the geographic origin and distribution of students. Forty-six per cent. have their home residence in the Cape Province, 32 per cent. in the Transvaal, 12 per cent. in the Orange Free State, and 7 per cent. in Natal. Three per cent. come from beyond the borders of the Union, mostly from Rhodesia. Students of one province often go to a university in another province—not only for post-graduate, but also for undergraduate work. The most conspicuous example of that is the Orange Free State. Only 30 per cent. of the students who have their homes in that province attend

[1] In calculating these unit costs part-time students were reduced to a full-time basis of student-hours in order to make the figures comparable for the different institutions.

the Free State's institution, the Grey College. University institutions, therefore, in South Africa are actually serving, and should be planned to serve, national rather than provincial needs.

In answer to the question which parts of the Union are relatively the most prolific in producing university students, I found that for every 1,000 pupils enrolled in the public schools in each province, the Cape Province sends to university institutions 17·6 students, Natal 15·3, Orange Free State 14·4, Transvaal 13·1. The average for the Union is 15·0. I found moreover that the correlation coefficient between the percentage of the school population (according to districts) which proceeds to university and the intelligence level of school children as measured by intelligence tests is ·71. With taxable income the correlation is ·68 and with the density of the population it is ·42. These figures give one a rough indication of the factors which play a rôle in determining the quota of students which a particular area will send to our university institutions. The native intelligence of the people and the general cultural *milieu* of an area (and here tradition plays a strong part) seem to be the most potent factors.

Social and Economic Origin

The second question which I went into was the social and economic origin of full-time university students. I found that 27·3 per cent. of the students come from the farming community. This is nearly equal to the proportion (29·7 per cent.) of the total male population above 15 years engaged in farming. The professions and those engaged in commerce contribute 24·4 per cent. and 25·1 per cent respectively to the student body, i.e. seven and three times as much respectively as their mere proportions of the population should warrant. Clergymen contribute relatively the most (10 times). While industry and mining comprise 25 per cent. of the male population above 15, yet they contribute only 7 per cent. to the university population. Looking at the different institutions one finds that 56 per cent. of the Stellenbosch students come from the farming community, 41 per cent. of Pretoria and only 15·4 per cent. and 11·6 per cent. of the Capetown and Witwatersrand students respectively.

If one studies the occupation of fathers according to the faculties in which their children are registered, one finds some interesting facts which throw light on the question how far the occupation of the father exercises an influence in determining the career of his children. For example, in the case of students whose fathers are in the legal profession one finds that, while they constitute only 3·9 per cent. of the whole student body, they comprise 19·3 per cent. of those taking law. Similarly, the medical profession (including dentists), which contributes only 3·0 per cent. to the total, has a percentage of 7·6 per cent. of those studying medicine. On the other hand, it is significant that by far the biggest proportion of the students studying law and medicine come from the com-

mercial occupations (39·8 per cent. and 43·8 per cent. respectively). As a matter of fact, more men of commerce send their sons into medicine than into commerce.

More or less the same proportion of student teachers at the universities come from the land as are to be found in the provincial training and normal colleges. There does not therefore seem to be much reason to fear that, on the ground of selection, the university-trained teacher will be any less adaptable to rural conditions than the normal college-trained teacher.

Another significant fact to note is that, while the greatest proportion of those who are in the faculties of agriculture come from the land, only 69 per cent. of the fathers of the latter group *farm on their own land.* The agricultural schools and colleges are faced with the same distressing phenomenon even to a greater degree: where are these trainees going to find land to farm on? Or are they merely going to become farming "experts" *in vacuo*, or perhaps in Government service? Strangely enough, the agricultural students at our universities show the largest percentage of landless farmers amongst the fathers of the students in any faculty (barring theology, where only 66·7 per cent. of the students' fathers who farm are landowners). In theology 78·9 per cent. of the students are recruited from the farming population: I wonder what other country there is to equal this record? There are undoubtedly many advantages connected with the circumstance that the great majority of a country's teachers, spiritual and other, are recruited from the land. They have a stability of temperament which urban-bred folk do not have. On the other hand, there are disadvantages some of which will be noted in the next paragraph.

Intellectual Level

The third question which interested me was, how do university institutions and faculties differ as regards *the intellectual level of the students* which they draw? This level is difficult to gauge. We have no special scholarship examinations to serve as an indication. The matriculation examination has to suffice for all and the universities compete with each other in attracting the first-class passes.

According to the Joint Matriculation Board's examination results, about 15 per cent. of the passes are placed in the first-class for the whole country. Comparing the institutions as regards the percentage of first-class matriculants which they attract, we find that Capetown and Stellenbosch attract about 27 per cent., while Witwatersrand and Pretoria attract about 20 per cent. Rhodes stands highest of the university colleges with 23 per cent., whilst Potchefstroom and Natal stand lowest with 16·7 and 14·5 per cent. respectively. These two, be it noted, are the extreme cases of unilingualism.

If we compare faculties as regards percentage of first-class passes, we find that Law stands highest with 32·6 per cent.; then come Science with 31·0 per cent., Engineering 25·9 per cent., Medicine

23·2 per cent., Arts 23 per cent.; Education and Theology stand lowest with 17·1 per cent. and 11·8 per cent. respectively. Taking the percentage of first-class passes attracted by the normal and training colleges, the percentage is only 9·2 per cent. (1930 figures). If one compares this figure with the 15 per cent. of passes which are placed in the first class of all matriculants in the Union, then it is plain that the bulk of the teaching profession is recruited from a level of intelligence considerably below that of the average matriculant in the country. What the position of the teaching profession is in this respect in other countries, I do not know. The chances are that it is not better.

I adopted another criterion of the level of intelligence of university students: the number of times that students failed their standards during their school career. The results correlate fairly well with the above and lead us more or less to the same general conclusions.

Home Language

The fourth question which I investigated was the home language of university students. The results have a particular significance in connection with the growing dualism on cultural lines mentioned above and with the allied question of medium, which I shall discuss presently. Students were asked to state what language was most frequently used in their homes. 55·6 per cent. stated English, 40·0 per cent. Afrikaans, 3·1 per cent. another language (e.g. Hebrew, German, etc.), and 1·1 per cent. said they used English and Afrikaans equally often. Students were also asked to state the medium through which they had received most of their instruction while at school. The result showed that about two-thirds had received their school instruction through English and a little less than one-third through Afrikaans. It was found moreover that the percentage of Afrikaan-speaking students who had received their school instruction predominantly through English (10·2 per cent. of all students) is more than seven times as high as the percentage of English-speaking students who had received their school instruction through Afrikaans (1·4 per cent. of all students).

Just as Rhodes and Natal University Colleges cater for the most homogeneously English-speaking groups, having 93·1 per cent. and 90·0 per cent. English-speaking students respectively, so Potchefstroom and Stellenbosch are most homogeneously Afrikaans with 95·9 per cent. and 91·2 per cent. Afrikaans-speaking students respectively. At other institutions the cultural constitution of students is more mixed. At Capetown, for example, about a quarter of the students speak Afrikaans in their homes. At Witwatersrand they constitute only about one-sixth. At Pretoria, on the other hand, which has just declared itself an Afrikaans-medium institution, about 40 per cent. of its students either come out of English-speaking homes or have received their school instruction through English.

The classification of medium according to faculties throws some interesting light on the relative attraction which certain professions have on the two different cultural groups. There is a majority of English-speaking students in Engineering (77 per cent.), Law (74 per cent.), Commerce (72 per cent.) and Medicine (69 per cent.). On the other hand, a majority of Afrikaans-speaking students are found in Theology (100 per cent.), Domestic Science (95 per cent.), and Agriculture (74 per cent.).

Age

The fifth set of data concerns the ages of university students.

The median age of a full-time university student in South Africa is just about 20, the men being just about half a year older than the women. About 40 per cent. of all the students are women. No figures showing the ages of students in previous years have been kept, so that there is no telling whether the student body as a whole is now younger or older than it was (say) ten years ago. At present about 11 per cent. of the men and 15 per cent. of the women are 17 years of age or younger. About 23 per cent. of the men are over 21, compared with about 10 per cent. of the women. Over 70 per cent. of the whole full-time student body has not reached the age of 21. Part-time students are on the whole older, though they have a larger percentage of under-seventeens amongst them than the full-time group, probably owing to youngish students taking part-time courses in fine art.

Fees and Bursaries

The last set of data concerns the matter of fees and bursaries. In the table given under the section of university finance we have already shown that the universities collect about £34 in fees on an average per student. This does not include boarding fees. Class fees range from £20 to £25 per annum for the ordinary arts and science undergraduate courses. Of course, in connection with specialised professional courses, e.g. in medicine and engineering, the fees are higher, sometimes up to about £36. To these class fees must be added laboratory fees of about £4–£6 per annum, and registration and inclusive students' societies and sports fees of about £2 to £3 per annum. Sometimes there is also a Benefit Society fee which provides insurance in cases of illness. Then there are examination fees which range from £5 to £10 according to the examination. In the case of higher and professional degrees these fees are higher, and lastly, there are graduation fees also, ranging from about £2 to £10. All these amount to about £35 per annum for the ordinary undergraduate. Boarding costs from £50 to £70 at the university residences. In the larger urban centres boarding costs are naturally higher, and in this respect the universities and colleges situated in small towns, e.g. Stellenbosch, have an advantage over others. Also students tend to spend less in small towns than in cities, and it costs their parents less to keep

them there. About 44 per cent. of all students live in university residences; 20 per cent. are in private lodgings, and 36 per cent. live at home. Of course, it is in the big urban centres like Capetown and Witwatersrand that we find the majority of students living at home. There are on the whole relatively more women students in residence than men.

Education authorities, like Sir Carruthers Beattie, the Principal of Capetown University, maintain that the least a boy can go through a University on is £120 yearly. Others put the figure higher. When one remembers that, as a general rule, the South African student does not earn during the long vacation, but is entirely a dependant, one will not be very far wrong in placing the total annual cost of a student to his family at about £180 to £200.

Entrance bursaries at the different university institutions range in annual value from £20 up to £50. These will not enable a really poor man to place his son at college, however brilliant that son may be. These bursaries are generally given solely on merit (i.e. on the results of the matriculation examination) without reference to the pecuniary circumstances of the recipients.

In 1931 the universities paid out a total sum of £33,539 in bursaries. From a questionnaire which I submitted to all full-time students I found that about 60 per cent. of the students in South African universities are apparently able by private means or parental support to continue their education without outside financial aid. Students obtain bursaries also from some sources outside the universities. Many students also raise loans privately and from public and semi-public bodies. *In toto* about 2,000 full-time students are in receipt of bursaries and/or loans amounting to something like £90,000 per annum. The medium size of a bursary held is about £30 and of a loan about £38 per annum. More than half of the loans are from the provincial Education Departments, and are held by student teachers who take academic courses at university institutions. These loans are recovered by the Departments by making deductions from their salaries after these students commence teaching.

Student Organisations

Each university has a Student Representative Council which administers all matters pertaining to students' organisations and funds. It is recognised by the university authorities and assists the Senate in matters pertaining to the discipline of the students. Then there is the National Union of South African Students, which was formed in 1924. It is officially recognised by the various students' Representative Councils, by the Senates and by the Union Government as the body representing all the students in the country. Each university sends delegates to the National Union of South African Students' Council, which meets annually and carries out the work of the Union.

This organisation has already done very useful work in organising

student tours overseas, regulating inter-university sport, running an annual Students' Parliament (which discusses current political and social problems), and in every way encouraging the interchange of opinions. At one time they tried to establish an Employment Bureau by which students would be enabled to get work during the long vacations. The scheme collapsed, largely through lack of support on the part of the farmers. This Students' Union had representation on the Government Commission which went into the question of a National Flag for South Africa. Through it the student body expressed itself forcefully against the threats some years ago to interfere with the religious liberty of the universities.

On the whole, the principle of self-government by the students as regards their own activities is accepted and applied in South Africa. In the university residences there is usually a member of the staff in charge. He co-operates with the house committee consisting of students. At Stellenbosch the men students elect one of their own number as *primarius*, and they care for the discipline of the hostels themselves without the assistance of a member of the university staff. As the chairman of the Students' Representative Council one day remarked in a Graduation Day speech, referring to the sheltered existence of students at Stellenbosch, " One can do this sort of thing at Stellenbosch, because to be really bad at Stellenbosch required more backbone than the average student could boast of." On the other hand, Capetown University feels that the young student is faced with difficult problems of adjustment and may be in need of advice and guidance from some older person who lives on the spot and may act *in loco parentis*.

University sport is on a high level in South Africa—both in athletics and in organised games, especially in Rugby football. The university Rugby fields have always been the best training-ground for future football " stars." There are a number of people in authority who think that sport is being overdone. If I study the position in other English-speaking countries, however, I doubt whether we have got to that stage yet. Nowhere will one find a paid " coach " as in America. On the whole, sport in South African universities is still much of an amateur and incidental business. Moreover, those qualities of leadership, as well as of sportsmanship, which are being developed at our universities constitute perhaps the most widely pervasive single influence which affects South African social life wherever schools are found.

VI. The Teaching Body

Just as the constitution of the student body determines the social character of a university, so the constitution of the teaching body is probably the most potent factor in determining the academic spirit of a university. The quality of the staff is much more vital than the size and quality of the buildings of a university. While it is admitted that, in a pioneer country, the proper housing of students is an important matter to consider, still, when one studies the

university situation as a whole, one finds some justification of the view so often expressed by visitors from overseas that South Africa has spent too much of her limited funds on bricks and mortar, instead of going all out to get the best possible men to lay the spiritual foundations of advanced learning in this young country.

I say this without wishing to cast reflections on the present personnel of our universities, some of whom do first-rate work. Still, there is no getting away from the fact that the emoluments of university instructors in South Africa are hardly designed to attract lights of the first magnitude in the academic world. I will go so far as to say that one great man who leads the world in his particular field of knowledge would probably have added more prestige to university life in South Africa than a block of buildings however imposing. After all, the university originated with a body of teachers. What they had to say was the thing that mattered, and as long as they had something worth while to say they attracted students. In what sort of building or place they met was a minor consideration. Socrates, the first university teacher, merely conversed in the market-place and the students gathered round. Plato and Aristotle were his alumni, a record hard to beat by any university. After all, it was Abelard, the teacher, who by gathering students around him founded the University of Paris. Only centuries later did they bother about buildings. In the few and outstanding cases of private munificence which we have had in South Africa this point has been entirely lost sight of.

In the two big urban universities, Capetown and Witwatersrand, where living is dearer, professors receive from £900 to £1,000 per annum. Only in isolated cases, in the faculties of engineering and medicine, does a man get a little more. In most of the other institutions professors start at £650 and rarely go beyond £900. Lecturers receive £400 and Senior lecturers may go up to £650, according to length of service.

When I am asked what really is the peculiar spirit which characterises the South African university as distinct from that in another country, I confess that I am at a loss to give a satisfactory answer. The Englishman knows what Oxford and Cambridge, and the American what Harvard and Yale stand for. Perhaps South African universities are too young to have developed such a specific tradition of their own, as regards the inward spirit of university study, that one can define it easily. Some of our university institutions tend in academic outlook towards the English (Oxford and Cambridge) or rather to the Scottish side, and others more to the Continental side, according to where the majority of their teaching staff was trained. It will, therefore, be of interest to give a brief analysis of the staffs of our universities.

Proportion of Teachers Trained or Born Overseas

On going through the calendars of the various institutions and classifying the staff according to the place where they received their

advanced training, I found that about 75 per cent. of them are men with overseas degrees. Those who have received their advanced training in South Africa are mostly (80 per cent.) relegated to lectureships, the professorial positions being held almost entirely by the overseas-trained, and particularly the overseas-born, men.

Of those who studied overseas about half have English and Scottish degrees and less than one-fourth have Continental degrees. About 10 per cent. have American degrees ; these are chiefly in the two faculties of agriculture and a couple in education.

Of course, a number of South African-born men have gone overseas for advanced study. Nevertheless, more than half of the professors and more than a third of the total staffs are overseas-born. About 75 per cent. of the overseas-born men are from the British Isles and the large majority (80 per cent.) of the latter are in professorial positions.

Though these observations are true of the universities as a whole, there are great differences as regards the constitution of the staffs in the different institutions. We have, for example, at the one extreme an institution, like Potchefstroom, which is almost entirely, if not wholly, staffed by South African-born men, while at the other extreme we have Rhodes and Natal University Colleges, where the number of South African-born or South African-trained men amongst the professors is almost negligible. More than half of the total staff, and about seven-eighths of the professors, at the University of Capetown are overseas-born. As a matter of fact, that university has not appointed as a professor any South African or American-trained man. Over 80 per cent. of its professorial staff are men with British (chiefly Scottish) degrees, and only about one-seventh of the entire staff have Continental degrees. At Witwatersrand the position is much the same, except that there the majority of the entire staff and more than a third of the professors are South African-born.

Now, it stands to reason that the type of instruction given in these two institutions, where more than two-thirds of the staff consists of men trained in England and Scotland, will differ from that given, e.g. in the more Afrikaans universities like Pretoria and Stellenbosch, where not only about 80 per cent. of the staff is South African-born, but where from a third to forty per cent. of the entire staff has been trained on the Continent of Europe (about half of these in Holland). The proportion of Continental-trained professors is about half for Pretoria and about two-thirds for Stellenbosch.

As we have indicated before, there is no doubt that the type of training given at a university depends on the teaching staff; their ideals, their methods will influence the ideal and methods of the students. If the professor comes from a university where research is predominant, the chances are that he will (other things being equal) bring with him something of that spirit of research and will inspire his students to do research. If, on the other hand, he comes from a university where (as far as his own training was concerned) the methods were mostly those of the school, i.e. spoonfeeding, he

is likely to carry over these methods and to exalt the importance of lectures and examinations.

The organisation of university studies is probably the field most easily influenced by the origin and training of the staff. It is to this point that we shall give our attention next.

VII. Courses of Study

The following are the figures giving the number of full-time and part-time students registered in the different faculties in the university institutions of South Africa in 1932.

FACULTY	GRADUATE	UNDERGRADUATE	TOTAL
Pure Arts and Science	300	2,787	3,087
Education	286	263	549
Medicine and Dentistry	61	842	903
Commerce	30	737	767
Engineering and Technology	17	894	911
Law	127	175	302
Fine Arts and Music	4	474	478
Agriculture	23	225	248
Other Minor Faculties	15	54	69
Total	863	6,451	7,314

Organisation

The entrance examination to the university for degree purposes is matriculation. Some non-matriculated students (3 per cent. full-time, 26 per cent. part-time, and 8 per cent. of total) also attend, but they work only for the so-called diploma courses. Matriculation candidates must have passed in six subjects, including Latin *or* mathematics.[1] Prior to 1931 it was Latin *and* mathematics. In consequence of this choice, we find that the number taking both these subjects for matriculation is decreasing—a fact which will materially affect the equipment with which students start their university courses, whether it be on the science or on the arts side. Such an option is supposed to give more freedom. In actuality its effect is limitative on the university level.

The bachelors' degrees are awarded after three years' successful university study. Witwatersrand is the only university which also gives an Honours B.A. after four years. The M.A. and M.Sc. course usually comprises four years. Degrees for the doctorate are mostly in the nature of research degrees awarded to bachelors (sometimes masters) of four years' standing, who have done some post-graduate work (two years) at the university and have presented a satisfactory thesis. The course for a degree in Medicine (M.B.,

[1] See *The Year Book of Education*, 1932, for statistics as to the proportion of candidates taking these subjects.

Ch.B.) is six years from matriculation, in Law (LL.B.) and Veterinary Science (B.V.Sc.) five years ; for Agriculture (B.Sc.Agric.), Engineering (B.Sc.Eng.), Music and Fine Art (B.Mus.) generally four years.

In 1931, 1,020 bachelors' degrees were awarded, of which 640 were in Pure Science and Arts. The others were in some form of applied or professional study. 117 received masters' degrees and 15 doctorates.

The universities differ as to the organisation of the courses for the bachelors' degree. At Capetown nine, at Stellenbosch ten, and at the other universities eleven qualifying courses are required to be completed during the three years. At Capetown three of these subjects must be continued for two years. This makes the curriculum rather thin. Recently the option was introduced that students might carry one subject on to a three-year basis. There are a large number of electives, but a student is compelled to take at least one course from each of the following groups : I. Latin *or* Greek *or* French *or* German ; II. Economics *or* History *or* Social Anthropology *or* Ethics ; III. Mathematics *or* Psychology *or* a Science subject. Then students are further limited by the prescription of ancillary first courses before they can proceed to courses on a second-year basis, e.g. they must have Latin I before they can go on to English II, or they must have Mathematics I before they can double in Science. There is divergence between the universities in their demands in this matter of ancillary courses. These differences are too complicated to describe here. Stellenbosch requires that two courses should be taken on a three-year basis. In the first year students usually take five, in the second three, and in the third two courses. The other universities spread their work out in more or less similar fashion.

The Defects of an Elective System

In this respect the new university system differs radically from that which obtained before 1918 under the old examining University of the Cape of Good Hope. There one had to study for the B.A. degree five subjects for the three years, at the end of which an examination was taken which measured the student's proficiency in all five subjects. The present system undoubtedly affords greater concentration on one or two subjects than was possible before and has much to commend it. This system runs the courses in tandem whilst the old system ran them abreast, so to speak. The weakness, however, it seems to me, of the tandem system is that a student finishes his examination requirements on a piecemeal basis, and on the completion of each little piece the student receives a licence to forget. He has completed it and he is finished with it. This system is very common in a number of universities in America, where the completion of a multiplicity of so-called units constitutes the requirement for a degree.

An interesting principle in the psychology of learning, Jost's Law is involved here. It may be paraphrased as follows: If an equal amount of attention is devoted to each of a different number of subjects, then that subject with which a student has been in touch longest will be the one he will remember longest. For example, a subject studied by a student for one hour a week for three years will remain with him longer in after life than a subject studied for three hours a week for only one year, other things being equal.

Weakness of First-year Courses

Then there is another point of criticism. Students are supposed to take (and actually do take) a number of courses only for one year and then they drop them—the idea being that they are broadened culturally by making a nodding acquaintance with a variety of subjects. Thus a student takes, for example, a one-year course in Zoology or Botany or Geology in order to get some scientific outlook upon life. Or he takes a course in first-year French or German in order to get an insight into the noble cultures of France and Germany, and then these courses are dropped. The fact of the matter is that these laudable objects are very rarely attained. The real objective for the student is to get through these courses merely to pile up the credits required for his degree. The weakness of the whole system lies in the fact that these first-year courses are not given with these objects in view. They are given merely as an introduction to the second- and third-year courses, *as if every student in the first year is going to remain in that class for two or three years*. For those who take it only for one year it is a disconnected fragment of a big picture which they never see whole, instead of a beautiful miniature which can be appreciated and loved as a clear-cut unity whether the student stops there or not.

It is the old fallacy of confusing the logical with the psychological concept in learning. For example, take a first-year course as it is often given in any one of the three sciences mentioned above. There are many professors who believe that they lay a sound foundation by starting their first-year students on classification and keeping them almost entirely on this abstruse aspect with only a little illustrative material thrown in. There these youngsters break their heads over the most complicated terminology until at the end of the year many of them have learnt just enough of this dry-as-dust business called Science to be thoroughly sick of it. When they drop the subject they have achieved probably as little appreciation of the fascinating wonders of nature, or have had aroused in them as little enthusiasm for the real scientific spirit which actuated the great workers in science, as would have been the case had they studied Latin grammar, which is also a triumph in logical classification. I do not deny that for the few who do continue beyond the first year there is some benefit reaped (by the law of increasing returns) out of that first year's grind. It is only after the second or third year that this work begins to have real significance and value for them.

The practical upshot of this is that the first-year course, whether it be in natural science or in the humanities, should be so organised that it constitutes a rounded-off whole ; so that it is worth while also for the students who do not go any farther (and they are the large majority, whose interests, if anything, should have preference). Surely every university subject has within its compass sufficient things of vital interest to build up a course which will be neither trivial nor superficial, but sufficiently close to the life and interests of the student to kindle enthusiasm rather than distaste. I have in mind the kind of course a D'Arcy Thompson or a Julian Huxley would give in Science to a group of young people from 18 to 19 years old. It is essential that only the ablest men in the university should give this first-year course. So much depends on first impressions.

Superficiality versus *Specialisation*

There is another problem which pertains to the organisation of the curriculum. If true culture is the ability to see life connectedly and whole, the question arises, how is the university going to set about developing that true culture ? Is this to be achieved by the wide but somewhat superficial study of a large variety of subjects, or by going deeply into only a few ? Against the latter alternative may be brought up the dangers which lie in over-specialisation. We notice these particularly in the work students do for the professional degrees. Too often we find that students who receive degrees in engineering and in medicine are merely skilful barbarians. They have achieved hardly any appreciation of the humanities and of the cultural background of the civilisation of which they are supposed to be the bearers in a dark continent. On the other hand, we have the practical difficulty mentioned above in connection with the former alternative. Students are faced with such a variety of unrelated subjects that they lose the wood for the trees. Moreover, the advocates of this alterhative hold that, if one studies one subject, e.g. a science, deeply enough, one does eventually reach the common roots of all sciences, and in this way one learns to appreciate their interrelation and achieves that unified view of life which is the mark of a truly educated man. The organisation of studies is, however, a very difficult problem, to which I confess I do not see an adequate solution.

The problem is by no means made easier by the increased demands of the market-place made on the university to meet the professional and vocational needs of our society. To this point I shall return presently.

Faculties

The following are the faculties provided for the South African Universities.

The University of Capetown confers degrees in the faculties of arts, science, engineering, law, commerce, music, education, medicine and fine art, and diplomas and certificates in teaching, music, commerce,

bacteriology, public health, fine art, architecture, speech training (elocution) and African life and languages. The degrees and diplomas of the Medical School are recognised for purposes of registration throughout the Union and Southern Rhodesia, and the degrees in law are accepted for admission to the Bar. There is also attached to the University a School of African Life and Languages, for the special study of native languages and customs. In 1922 the South African College of Music was amalgamated with the University as its department of music. In 1925 the Capetown School of Art was taken over and extended as the Michaelis School of Fine Art.

At the *University of Stellenbosch* provision is made for courses leading to degrees and diplomas in the faculties of arts, science, education, agriculture, theology, law and commerce. Attached to the Faculty of Arts is a department of Bantu Studies and Ethnology and recently a department of Sociology has been established. In 1926 the Elsenburg School of Agriculture and the Faculty of Agriculture were amalgamated to constitute *The Stellenbosch-Elsenburg College of Agriculture of the University of Stellenbosch.* By this amalgamation the Faculty of Agriculture is brought into more intimate touch with the farming community. Provision is also made for courses in domestic science and forestry. The Union Government Department of Agriculture is associated with this College of Agriculture and finances it.

The University of Witwatersrand has faculties of arts (including education, music, fine arts, and Bantu studies), science, medicine, dentistry, commerce, engineering (including mining and metallurgy, mechanical and electrical engineering, civil engineering, chemical engineering, land surveying, quantity surveying, and architecture) and law, with courses leading to degrees in these faculties. Medical courses are conducted for post-graduate diplomas in public health, tropical medicine and hygiene, and psychological medicine. Diploma courses are also provided in Bantu studies (philology, social anthropology, native law and administration), architecture, quantity surveying, actuarial science, and in a number of arts subjects. The Medical School is situated on Hospital Hill, close to the group of hospitals and the South African Institute for Medical Research, all of which are associated with the training of medical students.

Pretoria University provides courses for degrees and diplomas in arts, science, agriculture, veterinary science, law, divinity, education, music, commerce, public administration, social work, architecture, quantity surveying and domestic science. The Faculty of Agriculture is a strong one and the Faculty of Veterinary Science works in close co-operation with the Government Research Laboratories at Ouderstepoort. The research work in Tropical Diseases initiated by Sir Arnold Theiler at the latter institution is world-famous.

Lastly comes the *University of South Africa* which has, on a federal basis, the following faculties: arts, science, education, law, commerce and administration, and engineering. The teaching is done through departments in the constituent colleges.

Duplication of Faculties

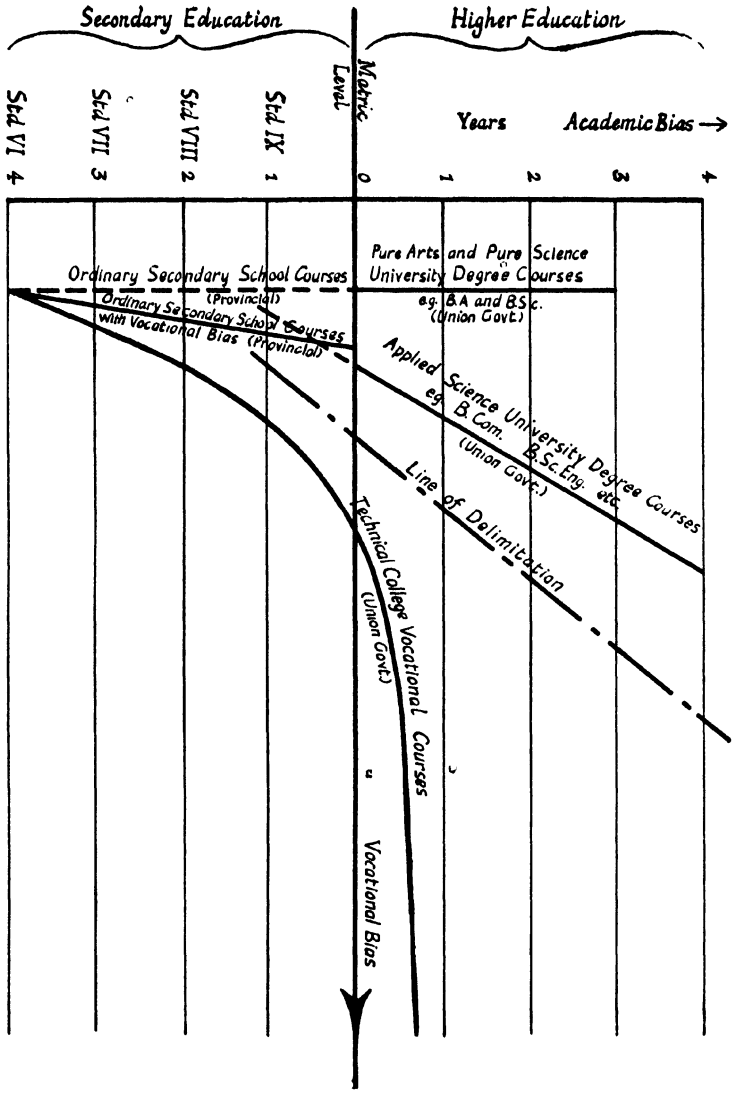
Owing to the insistent demands of local, provincial and cultural interests, higher education in South Africa is always faced with the problem of the duplication of expensive faculties in various institutions, when the whole Union can really afford to have only one or at most two good ones of each kind. Thus far some agreement has been arrived at with regard to medicine, engineering and agriculture. The two big urban universities (Capetown and Johannesburg) concentrating on medicine and engineering, and

the two smaller country universities (Stellenbosch and Pretoria) concentrating on agriculture and veterinary science, though we find engineering being developed also at Durban in connection with the Natal University College. Trouble, however, arises when we come to the proper provision for law, commerce, social science and African life. Here there are many rival claims and the result is wasteful duplication. If the language complication had not also come in, a way might have been found out of this difficulty, by arranging for two institutions which are within easy travelling distance apart (e.g. Stellenbosch and Capetown ; Pretoria and Johannesburg) to share a good man. A concentration of resources could thus be achieved by an interchange of personnel in certain specialised fields. This could be done particularly in the humanities and languages. In Science this may be possible also, but one would not be able to obviate the duplication of laboratories, which are costly things. In some of the smaller university colleges the laboratories are so inadequately equipped that it is almost impossible for them to do scientific work of an advanced nature.

Relation of University to Technical Education

This brings us to the last point in connection with the organisation of the content of university studies : the relationship between the universities and the technical colleges. From the time that the Union Department of Education began taking over these institutions in 1923, they have developed rapidly. They have come to look upon themselves as institutions of higher education, and claim that some of their courses should be recognised as equivalent to those given at universities. Soon the need arose to make a clear line of division between these two types of institutions. This resulted in the appointment of the University Commission under Dr. J. G. van der Horst, who brought out a valuable report in 1928. In accordance with this report, the technical colleges, while still under the same Union Department of Education which administers universities, were demoted. As institutions they were regarded as giving education of a secondary standard. The line of demarcation now followed is rather well illustrated by the diagram on page 772, which I take the liberty of reproducing here from the University Commission's report.

In this diagram the horizontal line pointing to the right indicates the direction of the vocational bias. The vertical line pointing upwards indicates the direction of the bias of those studies usually followed by the student who is not actuated by any motive as to their immediate usefulness. The lines rotating away from the vertical towards the horizontal indicate the degree to which the different types of training lean over towards the vocational. The line drawn at an angle of 45° indicates the line of demarcation between types of training which may fall legitimately within the scope of the university on the one hand and those which belong more appropriately


Secondary Education
Higher Education
Std VI 4
Std VII 3
Std VIII 2
Std IX 1
Matric Level
Years
Academic Bias →
0
1
2
3
4
Ordinary Secondary School Courses (Provincial)
Ordinary Secondary School Courses with Vocational Bias (Provincial)
Pure Arts and Pure Science University Degree Courses
e.g. B.A and B.Sc. (Union Govt.)
Applied Science University Degree Courses
e.g. B.Com. B.Sc.Eng. etc. (Union Govt.)
Line of Delimitation
Technical College Vocational Courses (Union Govt.)
Vocational Bias

to the Technical College on the other. In actual fact the preliminary general education of the technical college students in South Africa is so low that it does not warrant those institutions doing work of a level higher than an equivalent to first-year university work. Then, too, the qualifications of the staffs of the technical colleges are not conceived to be on a level with those required from university teachers. In fact, most of the courses in the technical colleges are (as the line swerving to the right indicates) on a purely secondary level.

VIII. The Bilingual Medium Question

Pretoria

We have already had occasion to refer to the fact that the South African universities are dividing into two linguistic groups. The action of the University of Pretoria at the end of 1932 brought this to a head, when it decided to abolish the so-called " fifty-fifty " language policy and to institute Afrikaans as the language of the University. Unconsciously the other institutions had already ranged themselves, as we saw above, into two groups (*a*) Capetown and Witwatersrand Universities and Natal, Rhodes and Huguenot University Colleges, predominantly English-speaking; and (*b*) Stellenbosch University and Grey and Potchefstroom University Colleges, predominantly Afrikaans-speaking.

When Pretoria took the above decision it added the following two provisos: " (i) that safeguards be instituted to ensure the training of students in the full use of the other official language; and (ii) that the execution of this policy be applied gradually in consultation with the Senate and with a view to protect the rights of the unilingual members of the staff." In spite of the last-mentioned proviso, the English unilingual members of the staff have begun to feel uncomfortable with the fear of becoming redundant. In fact, a couple have already left the institution. Of course, this step was taken " primarily to meet the needs of the Afrikaans-speaking section of the community." Pretoria hopes thereby to capture mostly the students from the *platteland*. Evidence is, however, not lacking that these hopes may eventually turn out to have been unduly optimistic. The fact remains that one of the " needs of the Afrikaans-speaking section of the community," particularly in the rural areas, is the acquirement of a fluent use of English. An increasing number of the Afrikaans-speaking people is beginning to realise that they will not acquire that fluent use of English at an institution where they are going to associate almost exclusively with their own kind. A language is most readily acquired not *in vacuo* (which is the situation when students only study it from books and hear it only during the lecture hour) but by daily conversation with fellow students by living together in the same hostels and playing together on the same fields. For that reason a number of Afrikaans-

speaking parents prefer to send their children to the urban universities like Witwatersrand and Capetown, where they will be sure of acquiring English in a more natural and effective way. For the same reason, English-speaking parents have sent their boys to an Afrikaans university, though probably not to the same extent. The results of this mixing are all to the good from a South African national point of view, because most of these have left that university with a much better understanding of the other man's point of view than they had before.

Capetown

The language position in the University of Capetown is as follows—(I quote the words of the Principal):

> " In this University we have for years been experimenting, and the conclusions we have come to are (1) there is no demand for Afrikaans as a medium of instruction in professional subjects; (2) there is a strong and increasing demand amongst students whose home language is English for teaching of the language Afrikaans. We have recognised that and are endeavouring to strengthen our Afrikaans department so that it may cater for students whose knowledge of Afrikaans is nil up to and including those whose knowledge is such as a University has a right to demand. Special provision is also made for teaching Afrikaans to aspiring teachers, and for speech training in Afrikaans; as funds become available we shall more and more strengthen our staff in Afrikaans and ultimately be, we hope, in a position to give to every student what he needs in that language. In view of the fact that lectures are given almost entirely throughout the University in English, we have not the necessity for such provision in English, though in that department also some development is necessary; very few Afrikaans-speaking students speak and write correct English. The development of a tutorial system in the English department will, we hope, be of great use to those whose training at school has been through the medium of Afrikaans."

The Principle of the Mother-tongue Medium

The reason why the South African universities have drifted into two linguistic groups is partly political and social, but is also to some extent connected with the extension of the principle of *mother-tongue-medium instruction* from the primary schools (where it has both in theory and in practice been recognised in South Africa for about two decades) through the secondary schools (where it has, by the provision of " separate " schools, been more recently applied) to the university. There is no denying the fact that this principle, while unquestioned as regards the early stages of school instruction, has a decreasing validity, from the point of view of the psychology of learning, as one moves from the primary school upwards towards advanced studies at a university. I think that, taking everything into account, it will be difficult to prove that even our own South African-born professional men who studied overseas in England, Germany, France, or Switzerland through " foreign " media, are any the worse scientists, historians, philosophers, doctors, advocates, etc., for having done so. The chances

are rather the other way about, because the more universal the language in which such advanced studies are carried on, the wider the sources to draw from and the more thoroughly the study can be pursued. Learning at the higher stages has an element of universality which transcends local cultures. And in this respect a small language like Afrikaans, in which hardly any academic literature suitable for university study in the arts and sciences, let alone professional subjects, exists (except, of course, in Afrikaans itself), is suffering under severe disadvantages as a medium of instruction on the university level, in comparison with an almost universal language such as English, which has developed such a vast collection of textbooks, reference books, scientific journals, let alone general reading matter, indispensable for university instruction.

That is where the English-medium universities will be bound to score in the long run over the Afrikaans-medium universities. Students in the latter universities, I have found in my own experience, use English books with less facility than in the former. The terminology of their lectures is different from that of their reading, and the dualism in their learning process has a retarding effect. Our university students *read* far too little as it is. They are mostly one-book students who somehow cannot be emancipated from the " one textbook per subject " idea which was so firmly impressed upon them in the secondary school, and they can ill afford to cope with still further handicaps. Of course, the Afrikaans-medium universities use Nederlands books. I have found these on the whole less suitable as textbooks, because the arrangement of their content is less suited to the use of the average South African student than the English and American textbooks. This is more true in some subjects than in others.

To conclude, it is probably true that this insistence by some of the Afrikaans-speaking people on the principle of exclusive instruction through the medium of their mother tongue, even at these higher stages of learning, is due more to a desire *to further the interests of Afrikaans culture and the prestige of the Afrikaans language than to further the interests of higher learning and research as such.* Though it is sometimes contended that if Afrikaans keeps its place as a medium of instruction at a few universities for a long enough time, it may be that enough indigenous works will be published in Afrikaans for all branches of academic use. If this were possible, which I doubt, they say it will give a new impetus to research and learning in South Africa. Looking at the whole matter objectively and practically, however, I doubt whether the high cost of publishing scientific works on such a scale in Afrikaans—a language which at best will have a very limited currency—will not be prohibitive. Then, too, while it is true that more and more Afrikaans-speaking young men are coming along who are eminently fitted as professors of our universities, it is doubtful whether the automatic exclusion of non-Afrikaans-speaking teachers from some of our universities is in our best interests at this stage of our university development.

Conclusion : The Aims and Functions of South African Universities

From the above account it will have become clear how the character of a country's universities is determined by the economic, social, cultural and political condition of the community which they attempt to serve. To a large extent that element of universality which characterised the *universitas* during the centuries when Latin was learning's *lingua franca* has been lost, and accounts of universities in different countries to-day read much like a series of essays on national psychologies.[1]

Still, I find it difficult to give a satisfactory answer to the question which I have set myself in this article : What is the distinctive intention or entelechy (as Aristotle would have put it) of the South African university ? The answer is difficult for two reasons. In the first place, on account of the diversity or rather dualism to be found in our South African university institutions, what is the avowed aim of the one may be discredited by the other. In the second place, because South African universities have had such a short existence (scarcely 15 years) as independent teaching institutions, they can hardly be expected to have developed in such a short time a tradition of their own. Nevertheless, we wish by way of conclusion to indicate the main functions of the South African university, if it is possible for the moment to speak of such a diversity of institutions in the singular.

First let us state the aim of the university in general. I cannot define it better than Prof. Ernest Barker has done :

> " The aim of a university is, in the first place, to give the highest and final stage of general education to undergraduate students between the age of 18 and that of 22, partly with a view to preparing them for a specific profession or calling (such as that of engineering or again of medicine), but partly, and still more, with a view to preparing them for doing work of a better quality, in virtue of the better training they have received, in *any* profession or calling which they may subsequently enter. A university fulfils this first aim, not only through the intellectual equipment which it provides, but also through the moral quality of the common life which its existence brings into play—a common life of residence, issuing in various forms of spontaneous social activity, which serves as a discipline and a stimulus to all upon whom it acts. . . .
>
> " The second aim of a university is to promote and conduct research in the humanities and the various branches of science, partly through its professors and lecturers, and partly through the graduate students whom it attracts ; and this with a view both to increasing the sum of human knowledge and to deepening the current of human thought, so that a university may thus serve the national community in which it is set (and so far as possible the world at large) as a leader and guide in the fields of theology and philosophy, letters and history, politics and economics, science (both pure and applied), and the other interests and activities of the human mind."[2]

[1] E.g. *The University in a Changing World : A Symposium.* Edited by Kotsching and Prys. Oxford, 1932.

[2] Article on " Universities in Great Britain " contributed to *The University in a Changing World.* Oxford, 1932.

Now coming to the South African university in particular, we may find a hint as to its specific purpose in the injunction of Cecil Rhodes, who has done so much to promote university education, both at home and abroad. On the pedestal of his statue at Capetown, where he points with his hand to the north, stands inscribed : " *There lies your hinterland.*" Now, if white South Africa is to take upon its shoulders the responsibility of civilising this vast subcontinent of Africa—the continent of the future considering its vast untapped human and material resources—then the implications of this injunction for university education in South Africa are threefold.

The Ideal of General Education

In the first place, we, as the bearers of the torch of Western civilisation kindled for us by the Greeks, must keep that light undimmed—even in the face of isolating distance and of being surrounded by overwhelming numbers of black people just energing from primitive barbarism. The liberation of the human spirit (i.e. the Greek ideal of education) will be achieved in the face of such odds only by the insistence on a high level of *general* education, in order that, as Barker put it, we may, in whatever calling or profession we subsequently enter, do work of a better quality in virtue of that general preparation. Moreover, the process of admission to the university ought to be for South Africa *a fortiori* a process which ensures *la carrière ouverte aux talents*, wheresoever talents are to be found, because we cannot afford waste of this precious commodity.

I have calculated that of every 100 children who start school at one time or other about 8 pass matriculation or its equivalent and 3 go to the university. Moreover, South Africa has 3·3 full-time university students in attendance for every 1,000 of its European population. These figures are high when compared with England and the other Dominions. And rightly so. Yet we must do more, not only by way of increasing the enrolment of our universities but also by keeping the above-mentioned Grecian ideal steadily before us and raising our standards of higher education—because in too many cases do we find that so-called university work is merely a continuation of high school and taught in the same spirit.

The Duty of Professional Training

In the second place, if Africa is to be opened up, as it is very rapidly being opened to-day, it is up to the universities of South Africa in the first instance to provide the *professional* men (the engineers, the doctors, the teachers and administrators) to do that opening up. Too often do we hear the cry that the professions are being overstocked and that the universities must call a halt. Yes, let them raise their standards high, by all means. But the only investigation that has been made as to the placement of university trained men in South Africa has shown that this cry is unfounded.

Now, if we pay heed to Rhodes' injunction, it is doubtful whether our universities will easily reach the limit of over-production.

To train for professions is, therefore, a definite function of the South African university. In a pioneer country it cannot escape the obligation to train also for the practical needs of the country. As Mr. Frank Tate pointed out in his excellent article on University Education in Australia (1933 YEAR BOOK OF EDUCATION, page 465), "The university cannot take up the attitude that it is something apart from the general life of the time, and that it should be free to pursue its own life of study and research 'in a nook merely monastic,' without thought of ministering to the needs or of solving the problems of mankind."

If I may be permitted to turn the words of Prof. Barker round when he quoted Goethe in some other connection, I would put the position of the South African university in this way. Goethe said that "a talent builds itself in stillness." But he also said that a character builds itself "in the stream of the world." This applies also to the character of a university. Academic "stillness" is beatitudinous; but academic anæmia is dangerous.

In short,

> "The university, recruiting from every possible quarter and drawing from the whole community, furnishes in turn to the community the trained men and women who are likely to serve it best—the political leaders and the civil servants, the members of the great professions, and particularly of the great profession of teaching, the men who direct commerce and industry, or provide them both with that managerial and technical skill which, with the increasing complexity of the economic world, they increasingly require for their service."[1]

This, of course, is the direction in which nearly all the younger universities in England and the Dominions are moving *nolens volens*. There is, on the other hand, also the danger that, under pressure of professional and industrial demands, they may be so obsessed by technical zeal and by that attitude of mind which stands for immediate values and quick returns that they are swept out of their true course which must, above all, keep in view long-time values. Therefore, while meeting the inevitable demands of the professions, the universities should at the same time strain every nerve to inculcate in every student disinterested intellectual habits as well as professional knowledge and skill. Care must be taken that utility does not dominate the whole stage. For, even in the interest of the professions, it is essential that the professional faculties, especially medicine, law and education, should live in an atmosphere of research.

Research

This brings us to my last point, the provision for research. This function of the university has probably been the most neglected one in South Africa. In competition with the above-mentioned

[1] Barker, *op. cit.*, page 107.

two functions, research has been forced to take a back seat. It is a common phenomenon that a staff which is over-burdened with teaching and examining has little time or inclination to carry on research work worthy of the name. There are other reasons too :

(*a*) The spreading out of our resources in the effort to make provision for half a dozen ill-equipped laboratories in small institutions, instead of concentrating our resources in order to equip one or two first-rate ones, has hindered research, particularly in the natural sciences.

(*b*) Research in the humanities, as well as in the sciences, has been handicapped by the fact that our libraries are on the whole poorly equipped. There has been a great dearth particularly in serial literature. Recently there has been progress in one or two directions ; for example, Stellenbosch University has acquired a good collection of serial literature in psychology. It is significant that in the case of the two largest universities, Capetown and Witwatersrand, the libraries have been the last buildings to be provided. The one has just been completed and the other is in course of erection. One would have imagined that the library would have been one of the first buildings which a university, when starting, would put up. An unconscionable time is wasted by students, because they have no adequate library accommodation where there is a quiet nook to work in or browse about during their off periods between lectures.

In 1918 a Research Grant Board was established. It is attached to the Department of Mines and Industries. Its functions are to advise the Government generally regarding the encouragement of research in the Union and to administer all Government grants in aid of research. It is also the body through which the Union of South Africa is affiliated to the International Research Council. Members of the university staffs are sometimes enabled to do research by participating in such grants. In this way, for example, the South African Group Intelligence Tests were drawn up and standardised—norms being worked out on the results of 16,500 children tested between the ages of 7 to 15.

The Carnegie Corporation of New York has through its generous grants given a great impetus to research in general and particularly in the field of social and racial problems. It was through their financial assistance that an elaborate survey was conducted of the " Poor White " Problem in South Africa. The universities, the Union Education Department and the Dutch Reformed Church collaborated in this investigation which lasted from 1929–1932 inclusive.

The fact that in recent years a number of university men have been called in to serve on Government commissions, e.g. in connection with the Native Question, the Gold Standard Problem, and the recent World Economic Conference, is significant of the increasing rôle which the universities are playing in the political and economic life of our country. This is all to the good, because

it brings the universities into organic relation with economic and social welfare, and it widens and liberalises the conception of culture.

If we apply Rhodes' injunction to this third function of the university, we find an indication of the specific contribution which the South African university can make in this respect. If I look towards our hinterland in the north I find two fields of research in which South Africa can make a contribution which may be described as almost unique and the significance of which transcends national boundaries.

In the first place, if that hinterland with the many pests and plagues lurking in its swamps and bush is to be made habitable by a European civilisation, we have to look to medical research for help. As a matter of fact, it is in this respect that the South African Institute for Medical Research (which works in close association with the Medical School of the University of Witwatersrand) and the Research Laboratories in Veterinary Science at Ouderstepoort (which work in association with the University of Pretoria) have already made scientific contributions which have more than national significance. I have in mind the research work which has been carried on in connection with the spread and prevention of malaria, bilharziasis and other parasitic diseases which attack man and his cattle. Then, too, South African research is leading the world in connection with the silicosis of gold mining. The annual expenditure in connection with the South African Institute for Medical Research alone was over £56,000 in 1931.

There is another respect in which, through research, the South African university has an opportunity of making a world contribution. That is through social research on the effects of the contact between an advanced European culture and a series of primitive native cultures. This situation presents fields of study to the sociologist, anthropologist, psychologist, economist and biologist.

If often strikes scientists from overseas that it is strange that South African universities have availed themselves so little of the wonderful opportunities which this almost unique laboratory of race-contact affords to the social scientist. Some beginnings have already been made at each of the four teaching universities, with the study of African life and languages, or Bantu studies, as it is sometimes called. In connection with this must be mentioned the practical pioneer work which is being done by the South African Institute of Race Relations in conjunction with the University of Witwatersrand. Nevertheless, there is a vast unexplored field beckoning the research worker. Some of the problems with which white South Africa is faced in this respect have been outlined in the YEAR BOOK OF EDUCATION for 1933, Section XI, and it is not necessary to repeat them here. There we have also given an account of the facilities for higher education for the native population. This chapter, therefore, deals only with universities for Europeans.

The effect of a large native population on the development of

university education among Europeans is indirect and perhaps to some extent unconscious; but it has nevertheless been real and it is a factor which will increase in importance as the years go by. In every way it strengthens the argument for a liberal provision of facilities. First, in the interests of the Europeans themselves, for it is evident that in the long run European civilisation and culture can retain its supremacy only if its exponents maintain it at a high level, and to do this they will need the advantages of university training. There will eventually be only one aristocracy, that of intellect. And secondly, in the interests of the natives themselves, for universities are organs of humanism which will look beyond and behind boundaries of race, culture and colour. It is in them that one may expect to find the tolerance and large-mindedness which the solution of the great native question calls for.

E. G. MALHERBE.

While assuming full responsibility for the views expressed in this article, I wish to record my indebtedness to Sir John Adamson (formerly Master of Rhodes University College), Sir Carruthers Beattie (Principal of the University of Capetown), Prof. W. Blommaert (Chairman of Senate, University of Stellenbosch), and Dr. S. F. N. Gie (Union Secretary for Education), with whom I discussed the university situation in general; and to one of my former students, Mr. F. C. Metrowich, of whose monograph on "The Development of Higher Education in South Africa—1873–1927," I made free use when writing the historical account of the South African universities.—E. G. M.

CHAPTER TWO

THE PUNJAB

Rapid Expansion

PERHAPS the most remarkable feature of educational development in the Punjab [1] during recent years has been its rapid expansion. The following figures taken from the report of the Hartog Committee indicate that the Punjab has been advancing far more rapidly than any other province.

TOTAL NUMBER OF MALE PUPILS IN RECOGNISED INSTITUTIONS

PROVINCE AND MALE POPULATION (IN MILLIONS)	1922	1927	PERCENTAGE OF INCREASE BETWEEN 1922 and 1927
Madras (20·9)	1,378,159	1,915,177	39·0
Bombay (10·2)	721,798	900,311	24·7
Bengal (24·2)	1,496,439	1,873,461	25·2
United Provinces (23·8)	871,750	1,161,235	33·2
Punjab (11·3)	489,755	996,570	103·5
Burma (6·8)	228,951	277,109	21·0
Bihar and Orissa (16·8)	657,596	949,711	44·4
Central Provinces (7·0)	292,291	349,264	19·5
Assam (4·0)	181,206	235,742	30·0

In very recent years there has been a temporary setback, due very largely to a reduction in expenditure owing to financial stringency; and also to some extent to the enrolment in schools for adults having been considerably curtailed in the interests of efficiency. In 1931–2, the total enrolment of boys and girls in all institutions, recognised and unrecognised, was 1,333,575. The percentage of pupils (boys and girls) to the total population was 5·61; that of boys alone to the male population was 8·82. These figures and percentages compare very favourably with those of most other provinces.

A pleasing feature of this rapid increase is that it has been shared by all communities,[2] notably by the Muslim community, which

[1] The main literature on Punjab education consists of:
(*a*) Annual and Quinquennial Reports of the Education Department, Punjab.
(*b*) *Report of the Punjab University Enquiry Committee.*
(*c*) *Punjab Educational Journal* (Messrs. Gulab Singh & Sons).

[2] The major communities in the Punjab are the Muslims with a population of 13,332,460; the Hindus with a population of 6,328,588; and the Sikhs with a population of 3,064,144.

had hitherto been backward in education. In the quinquennium (1922–7) the total number of Muslim pupils rose from 241,743 to 533,567; in that of 1927–32 the number rose again to 574,389. Another welcome feature of the statistics is that, though much leeway has still to be made up, Muslims are making better progress in the quality of their education, as larger numbers are reaching the higher stages of education.

Assistance to Backward Areas

These satisfactory results are due very largely to the deliberate policy of the Punjab Government in giving special encouragement to backward areas and to backward communities. This policy has been given effect to in a number of ways. Educational grants to district boards are assessed with reference to the needs rather than to the resources of each district. For this purpose each district is graded. As a result, a rich board receives in grant 50 per cent. of its approved additional expenditure; but to a poor board anything between 50 and 90 per cent. is given. Another effective means of assisting a backward area or community is the encouragement of its young men and women to become village teachers, and in that capacity to serve their community and district. Ample facilities have therefore been provided for young men (with the requisite qualifications) to receive training in the close vicinity of their homes in vernacular training institutions, with two or three units of forty students in each. Similarly, preference is sometimes given to young graduates (with the requisite qualifications) to gain admission to the Central Training College, Lahore, with a view to their serving later in secondary schools in their localities. Further, for the purpose of encouraging boys and girls belonging to backward communities and residing in backward areas, Government high schools have been started in many of these areas. Intermediate colleges, which comprise the two high and the two intermediate classes, have also been constituted with a similar purpose.

The Communal Problem

The Punjab has a great advantage, at any rate at the primary stage, in that there are only an insignificant number of segregate schools maintained for the benefit of a particular community; practically all the children attend the ordinary primary schools, which are maintained by local bodies, except in the towns where primary departments are often attached to privately managed secondary schools. In other provinces the position is far less satisfactory. For example, in 1927 there were over 19,000 *maktabs* in Bengal, with more than 600,000 Muslim boys enrolled in them. In Bihar, again, the Director of Public Instruction reported in the same year that "there is in progress a movement for substituting for the village school a variety of schools intended for the benefit of particular communities. We are now reaching a stage when each

village wants a primary school, a *maktab* and a Sanskrit *pathshala*. In addition, it is claimed that even at the lower primary stage separate schools are necessary for girls, and in many cases separate schools for the children of the depressed classes. Thus, in the poorest province of India, we are asked to provide five primary schools for a single village."

On the other hand, the Punjab is unfortunate in the clash of communal strife and of undisciplined competition in the higher stages of education. The excessive number of communal secondary schools and even of colleges results in extravagant competition, often in a lack of discipline and in reduced efficiency. Moreover, the segregation of children belonging to the several communities in separate and often exclusive institutions from the age of early childhood until the age of early manhood tends dangerously to accentuate racial and communal differences and proves an obstacle to the attainment of unity. An antidote has been provided to some extent by the admirable spirit engendered by the Boy Scout movement, which has encouraged a love of healthy exercise and recreation, has aroused a desire to participate in the work of social service, and gives hopes of transcending the baneful limitations of caste and creed. Another hopeful feature of Punjab life is the keenness of boys and girls alike for the playing of games, and also the skill with which many play those games. The records of the Indian Cricket Team which toured England in 1932, and of the All-India Olympic Hockey side, which was unconquerable in their recent tour in Europe and America, afford eloquent proof of this statement.

Progressive Communal Institutions

The foregoing remarks should not be interpreted to suggest that these communal institutions have not done useful work at a time when school facilities were inadequate and when a greater stimulus was needed for educational effort. Many of these schools are well-housed and staffed, and their pupils generally acquit themselves creditably in their examinations. The Sikh community has shown special enterprise by maintaining some forty Khalsa high schools in the province. Indeed, the Sikhs are among the most progressive of all communities in India. It is significant that the Ludhiana district, in which they predominate, recorded in the recent census the highest percentage of literacy in the province. Among Hindus, the Arya and the Sanatanist sections have also been energetic in maintaining schools.

European Schools

In the matter of European schools, which are maintained primarily for the benefit of the children of Anglo-Indians, a beneficial policy of concentration has been carried out in the Punjab. The North-Western Railway has adopted the practice of granting assistance to the children of its employees in order to attend the ordinary European or Indian schools, at whatever distance, in preference to

the policy of many other railways, which maintain small schools at outlying stations in order to meet the needs of scattered groups of children. The Anglican Church has adopted a similar policy and now concentrates its resources almost entirely on maintaining a few good schools in the hills. As a result of these well-timed arrangements, the European schools in the Punjab compare favourably with those in other parts of India. Of particular interest are the two Henry Lawrence foundations, at Sanawar in the Simla hills and at Ghora Gali in the Murree hills; and the Bishop Cotton School, Simla, which was founded by Bishop Cotton in memory of those of the community who perished in the Mutiny. A valuable training class is attached to the Lawrence School and College at Ghora Gali, to which recruits from all over India are admitted. Many of the European schools have gained a well-merited popularity. Applications from Indian boys and girls are becoming very frequent, with the result that in some of the schools Indians are admitted up to 25 per cent. of the total enrolment.

Indian Upper Class Education

The Aitchison College, Lahore, is a Chiefs' College, and caters for the children of the upper classes, mainly the large landowners. In the past this, in common with colleges of a similar type in India, served a useful purpose in providing a form of training far superior to that given in the ordinary schools, especially in the matter of games and the formation of character; but there are now unmistakable signs that they have had their day and that the time of reconstruction is at hand. The conditions of admission are very exclusive, and the number of boys on the rolls are so insignificant that school organisation, both indoor and outdoor, is a matter of grave difficulty. In consequence, the finances are usually in a very unsatisfactory condition. A further complication has arisen owing to the institution of the Prince of Wales' Royal Military School at Dehra Dun, whose main function is to prepare boys for a military career. The demand is therefore becoming insistent that schools of this type should give way to a more modern type of school to be conducted generally on the lines of, but not in rigid imitation of, the great public schools in England.

The Depressed Classes

The Punjab is also fortunate in the comparatively advanced position of its depressed classes. Old-time prejudice is rapidly disappearing, and more and more are children of the depressed classes being received on equal terms with children more fortunately circumstanced in life. The policy of the Punjab Government is therefore to discourage the creation of separate schools for these classes, but at the same time to safeguard their interests in the ordinary schools. Encouragement is also given by the award of special scholarships and stipends, especially in the training institutions and in the higher ranges of study. Progress during the last

ten years has been most hopeful, even remarkable. In the quinquennium ending in 1926–7, the number of pupils from among the depressed classes advanced from 1,182 to 19,502, of whom as many as 15,308 attended the ordinary schools. In the succeeding quinquennium, the number rose farther to 33,196, an increase of 70 per cent.

Education of Girls

The Punjab is faced by a grave disadvantage in the attitude often adopted towards the education of girls. In consequence of the general reluctance of the average Punjabi parent to send his girls to school and, still more, to keep them at school for a sufficient time to enable them to benefit by their schooling, progress in girls' education has not been as rapid as in the case of boys. This point of view is suggested by the following figures taken from the *Hartog Report*.

TOTAL NUMBER OF FEMALE PUPILS IN RECOGNISED INSTITUTIONS

PROVINCE AND FEMALE POPULATION (IN MILLIONS)	1922	1927	PERCENTAGE OF INCREASE BETWEEN 1922 AND 1927
Madras (21·4)	367,359	525,697	43·1
Bombay (9·27)	175,079	215,859	23·3
Bengal (22·5)	338,578	416,415	23·0
United Provinces (21·6)	93,309	119,215	27·8
Punjab (9·4)	62,867	89,517	42·4
Burma (6·4)	116,714	166,193	42·4
Bihar and Orissa (17·2)	105,771	115,785	9·5
Central Provinces (7·0)	38,390	42,359	10·3
Assam (3·6)	26,808	34,691	29·4

More rapid progress, however, has been made in subsequent years. In 1931–2 the total enrolment of girls' schools (including unrecognised schools) has risen to 196,693, or an increase of 76,056 during the quinquennium. There has also been much improvement in the quality of education. The number of successful girl candidates in the matriculation examination has risen from 60 in 1923 to 408 in 1932, and that in the middle school examination (which is held at the end of Class VIII) from 416 to 1,900. These figures show conclusively that not only are more and more girls coming to school, but also that they are staying longer at school and are making better progress.

The following table from the *Hartog Committee's Report* is pertinent in this connection.

NUMBER OF PUPILS IN CLASS IV OF CIRLS' SCHOOLS BY PROVINCES

Madras	19,097	Burma	3,097
Bombay	16,139	Bihar and Orissa	1,250
Bengal	4,326	Central Provinces	2,500
United Provinces	3,656	Assam	1,020
Punjab	6,130		

Thus, in 1927 the Punjab was third, though a bad third, in the enrolment of girls in Class IV of the schools. The fact that the number of such girls has advanced from 6,130 in 1927 to 11,897 in 1932, or nearly doubled itself, is a striking example of the progress which is being made.

Higher Education for Girls

The Punjab Government has done much to stimulate the higher education of girls in recent years, mainly by the institution of Government high schools in the larger district towns. There are now twenty-two such schools in the province, many of them accommodated in fine buildings with pleasant surroundings. There are also a number of good high schools for girls under private management. There are two colleges in Lahore teaching up to the degree standard, the one a Government institution and the other, the Kinnaird College, a Mission institution. A new Government college teaching up to the intermediate standard has very recently been started at Amritsar. The prospects of further improvement in this direction are therefore bright.

The Language Difficulty

The right development of girls' education suffers, however, from two grave disabilities. Except in the larger towns, the number of girls desirous of attending school is often very small; and this disadvantage is accentuated by the demand frequently and persistently made for separate Hindi, Gurmukhi and Urdu schools. Thus, financial and teaching resources are often dissipated.

Shortage of Teachers

The main difficulty in organising girls' schools in rural areas, however, is to find teachers. It is comparatively easy now to recruit large numbers of girls in the training institutions, but it is wellnigh impossible to make satisfactory arrangements for their living accommodation in the villages in which they will teach. A possible solution is to employ village girls, but very few of these have been able to receive sufficient schooling for the task owing to the inadequacy of the schools in the neighbourhood; and so there is a vicious circle. Efforts are now being made in the Punjab to institute efficient middle schools in well-selected rural areas and to attach to them small training classes; but progress must inevitably be slow. A better solution would be to promote a well-devised system of co-education in the village primary schools, but in this

PERCENTAGE OF GIRLS UNDER INSTRUCTION READING IN BOYS' SCHOOLS

Madras	55·8	Burma	78·5
Bombay	34·8	Bihar and Orissa	39·6
Bengal	14·4	Central Provinces	35·7
United Provinces	33·3	Assam	52·4
Punjab	8·1		

respect the Punjab is far more backward than any other province in India. This disadvantage is illustrated by the above figures taken from the *Hartog Report*.

The Financial Difficulty

The promotion of girls' education also suffers from inadequate financial support. In 1931–2, whereas the total expenditure on boys' education amounted to Rs. 273 lakhs, that on girls' education was only Rs. 35 lakhs.[1] In 1928 the Hartog Committee[2] recommended that "in the interest of the advance of Indian education as a whole, priority should be given to the claims of girls' education in every scheme of expansion." A few years later the Commission on Christian Higher Education[3] in India made a similar recommendation:

> "We believe that there is no more pressing need or more inspiring opportunity than that presented by women's education. The resources at present expended on men's and on women's education respectively do not at all represent the proportion of the needs and opportunities of men's and of women's education. We commend to all interested in the subject an earnest consideration of possible ways of rectifying this disproportion."

These are some of the main advantages and disadvantages which the Punjab possesses in its development of education. We shall now turn to the main features of its educational policy.

Primary Education: Waste and Ineffectiveness

The Hartog Committee[4] commented very pointedly on the waste and inefficiency which prevail in the educational system of India:

> "In the primary system the waste is appalling. The vast increase in numbers in primary schools produces no commensurate increase in literacy, for only a small proportion of those at the primary stage reach Class IV, in which the attainment of literacy may be expected. It is to be remembered that, with the present conditions of rural life, and with the lack of suitable literature, a child has very little chance of attaining literacy after leaving school; and, indeed, even for the literate, there are many chances of relapse into illiteracy."

The Committee justified this trenchant criticism by the table given on the opposite page.

The statistics show that in British India out of every hundred pupils (boys and girls) who were in Class I in 1922–3 only nineteen were reading in Class IV in 1925–6. This rapid diminution is mainly due either to "wastage," the premature withdrawal of children from school at any stage before the completion of the primary course; or to "stagnation," the retention of a child in a

[1] 1 lakh = 100,000 rupees = £7,500.
[2] *Report*, page 347.
[3] *Report*, pages 254–5.
[4] *Report*, page 345.

THE PROPORTION OF PUPILS IN CLASSES I, IV AND V [1]

PROVINCE	BOYS' SCHOOLS			GIRLS' SCHOOLS		
	1922–3 CLASS I	1925–6 CLASS IV	1926–7 CLASS V	1922–3 CLASS I	1925–6 CLASS IV	1926–7 CLASS V
Madras	100	26	11	100	16	9
Bombay	100	41	36	100	31	23
Bengal	100	11	7	100	2	1
United Provinces	100	18	15	100	8	6
Punjab	100	25	18	100	16	12
Burma	100	17	9	100	18	7
Bihar and Orissa	100	14	9	100	3	2
Central Provinces	100	46	16	100	23	7
Assam	100	17	6	100	9	4
British India	100	19	11	100	10	6

lower class for more than a year. The Hartog Committee tried to translate this alarming waste into monetary values, and concluded that "the total loss for the four years amounted to Rs. 14.4 crores,[2] or to 60 per cent. of the total expenditure on primary schools during that period."[3]

Efforts at Reform

Larger Schools

The Punjab has striven to render its primary system less ineffective and more productive of good results. In the first place, the number of inefficient single-teacher schools has been brought within manageable proportions. Whereas, in 1927, there were 40,184 schools of this type in Bengal and 28,695 in Madras, there were only 1,500 in the Punjab. This satisfactory result is due very largely to the fact that, as already shown, there are very few segregate schools in the Punjab, and the vast proportion of pupils attend schools maintained by public bodies. Thus the task of making a wise distribution of schools is rendered the easier.

Though the restriction of a school to three classes may diminish the burden on the teacher, it is by no means favourable to the promotion of literacy unless the children continue their education elsewhere. In many provinces the tendency is to regard the multiplication of schools of the single-teacher type as the easiest, though not the best, way of providing facilities for primary education. The Punjab has adopted the opposite course, the aim being rather to add two classes to promising primary schools and to convert them into lower middle schools; and also to add two classes to promising lower middle schools and to convert them into full

[1] *Report*, page 46.
[2] 1 crore = 100 lakhs = £750,000.
[3] *Report*, page 48.

middle schools. In pursuance of this policy, the number of lower middle schools (with six classes) rose from 402 in 1920–1 to 2,475 in 1931–2; and that of upper middle schools (with eight classes) from 213 to 766. The first-fruits of this development have been satisfactory, as more than half of the primary pupils now receive their schooling in the primary departments of secondary schools, where the teaching should be more effective and better supervised than in separate primary schools.

Inspection

Another advantage which the Punjab possesses is the comparative efficiency of its inspecting staff. The Hartog Committee dwelt upon this aspect, and recorded the following statistics[1]:

AVERAGE NUMBER OF SCHOOLS FOR INSPECTION IN

Madras	160	Burma	31
Bengal	177	Bihar and Orissa	111
United Provinces	100	Central Provinces	61
Punjab	80	Assam	104

The Hartog Committee also commented favourably upon the quality of the Punjab inspecting staff, as the large proportion of its members are trained graduates, who have been specially selected on account of their experience of rural conditions.

Teaching Staff

The efficiency of an educational system, however, depends mainly upon the quality of the teachers. Throughout India it is a task of extreme difficulty to recruit a sufficient number of competent and well-trained teachers, and the Punjab is in no way an exception. Strenuous efforts have been made, however, to meet this defect. In carrying out this task, the Punjab has benefited by the strength of its vernacular middle schools, which have supplied large numbers of recruits to its vernacular training institutions. As a result of this policy, in 1930–1 there were 20,254 or 81 per cent. trained and certificated teachers out of a total of 25,077 in vernacular schools maintained by district boards.

The Village School

Efficiency is not, however, the only consideration. If it is to be effective, teaching in rural schools should be in harmony with village conditions and requirements, and should therefore be related to matters which the village child sees and knows and understands. Attempts have been made to achieve these ideals. School farms and gardens have been started in many vernacular schools; and, to a considerable degree the teaching is adapted to rural requirements. The curriculum has also been revised so as to include rural science (a

[1] *Report*, page 69.

composite subject comprising agriculture, science, village sanitation, co-operation and elementary civics). But this objective cannot be attained merely by means of improved curricula and textbooks. The teachers should be men who know the village and can guide the village folk towards better conditions of life and work. Above all, the training should be such as will encourage pupils to remain part of the village and to spend lives of service to the betterment of the countryside. Such training is now attempted in the Punjab, notably in the Middle and Normal School at Moga, which is maintained by the American Presbyterian Mission. The movement which has been started in the Punjab towards a betterment of village conditions by means of a well-adapted scheme of rural education is being watched with great interest throughout India.

Compulsary Attendance

The Punjab has also given a lead in the matter of compulsion at the primary stage. The number of school areas under compulsion has now risen to 2,978, of which 2,924 are rural and 54 are urban. This record is satisfactory, but only up to a point. The main problem is to devise means for reducing the alarming waste and ineffectiveness which still persist throughout India in the primary stage. Some appear to think that the mere enforcement of compulsion will automatically solve this problem, but the very reverse may be the case. Unless the teaching is efficient, unless inspection is effective, unless the distribution of schools is wisely made, compulsion will inevitably result in increased waste and ineffectiveness. It is also of doubtful morality to compel parents to send their children to school, unless there is a firm guarantee that the schooling will be beneficial to them. There is, again, a danger in flooding the countryside with under-paid and corrupt attendance officers, who will batten on the people and make the very name of education a byword and a reproach. The Punjab has been well-advised in selecting as suitable places for the application of compulsion those areas which are the more advanced, where the teaching is in a reasonable state of efficiency and where public opinion is generally favourable. It is at least open to argument that punitive measures should be taken with greater severity against those who send their children to school, and then cause the waste of money spent on their schooling by withdrawing them prematurely. The Agricultural Commission was wise in suggesting that " it is more important to stop the wastage than to strain after the last truant." The latest Punjab record indicates that, in spite of many disappointments, the scheme is progressing and that, in some areas at least, considerable success has been achieved.

Preventing Relapse into Illiteracy

In view of village conditions throughout India, there is always a grave danger of relapse into illiteracy after leaving school. The

Punjab has attempted to meet this difficulty by organising in village schools a system of village libraries, and also by the institution of schools for adults. The difficulties are obviously great, but recent reports indicate that the libraries are gaining in influence and popularity. On the other hand, the results of the schools for adults are by no means satisfactory. The arrangements have recently been revised, and it is to be hoped that the less ambitious scheme which has been introduced will be more successful.

Collegiate and University Education

Report of the Enquiry Committee

The system of higher education has recently been reviewed by a Committee appointed by the Punjab Government in 1932, whose report has been published. The Punjab Committee were by no means as pessimistic as were the Calcutta University Commission fifteen years ago, but at the same time they were much disturbed by the rapidly increasing number of college students and by deteriorating standards.

> " Our main criticism of the existing system is that it has overtaxed its strength. The University is overburdened by the immense area of its jurisdiction, and by the ever-increasing number of students, many of whom are ill-fitted for such education. If the present rate of expansion is maintained and no relief is given, the burden will become intolerable. In a word, the University is becoming more and more an administrative machine. If the burden is increased, the machine may cease to function." [1]

The Constitution of the University

The Committee strove to reduce the excessive burden of the University, mainly in two directions. In the first place, they considered possibilities for reducing the huge area of its jurisdiction. Though in many ways appreciative of certain features of the affiliating system, especially in the early days of Indian universities, the Committee did not recommend the splitting up of the Punjab University into a number of separate affiliating universities.

> " It is particularly undesirable to institute new affiliating universities in small centres, which necessarily lack variety of intellectual interests and activities, and where, in consequence, universities would be exposed to the grave danger of becoming immersed in local intrigue and faction. Such universities would also be apt to lower academic standards, which would be detrimental to the older universities as well as to themselves." [2]

The Committee thought it

> " more desirable and practicable to aim at establishing several new self-contained unitary universities, but at present, with one possible exception

[1] *Report of Punjab University Enquiry Committee*, page 299 (Punjab Government Press).
[2] *Report*, page 197.

(Khalsa College, Amritsar), no centre in the Punjab can be considered strong enough to stand alone and to become the seat of an independent university. Every encouragement should be given, however, to promising mofussil centres to enable them to gather the strength necessary for future independence." [1]

It should be remembered that the North-West Frontier Province was removed from the scope of the Committee, who were thereby precluded from offering opinions regarding further development at Peshawar.

At the same time, the Committee did not favour the formation of a unitary university at Lahore, where long-established colleges have grown up with deep-rooted and valuable traditions. They pointed out that unitary universities have rarely come into being through the annihilation of colleges. They have either originated as unitary universities, or else have been developed out of a single college, which at first was part of another university and remained so until it had gathered strength to stand alone. In such cases, college traditions, far from having been stifled, have ripened.

The Committee therefore recommended an intimate association between the University and its constituent colleges in Lahore. On the one hand, the colleges as such should be represented on the governing authorities and thus become an integral part of the University; on the other hand, the University should exercise effective control over the colleges, especially in the award of financial assistance, in the making of important appointments, and in the supervision of teaching arrangements by its professoriate. In making these recommendations the Committee followed closely the proposals made by the Department Committee, which was appointed in 1926 to review the development of the University of London, especially in its general definition of a teaching university of colleges: "The ideal conception of the University on its teaching side is an organic association of institutions all actively engaged in university work and each foregoing some measure of full autonomy in order to share in and contribute to the life and government of the University as a whole."

Defects of Secondary and Intermediate Education

The second important proposal of the Committee for the relief of the University was to remove the intermediate classes from its jurisdiction. The adoption of this proposal would reduce the serious congestion in colleges, and also strengthen the foundations of the University. Students would then enter the University with a much better general education and at an age better suited for university studies. Colleges would then be able to concentrate effectively on true university teaching.

In spite of several meritorious qualities in the schools, notably

[1] *Report*, page 313.

the arrangements for the training of teachers in the Central Training College, Lahore, the Committee were critical of the school system, especially in its organisation and adjustment. They were actuated by a keen desire to remove two patent defects: the holding of biennial examinations, and the serious overlapping between institutions.

From Class VIII onwards, a Punjabi student is now subjected to an external examination every two years. In consequence, he spends almost half of the first year after each interruption in adapting himself to new conditions and often to new surroundings, and half of the second year in " cramming " for the next examination. Moreover, at each interruption of his course towards the degree he is apt to change unwisely the subjects of his examination. Thus there is little continuity of study, nor is there much opportunity for genuine education.

The second grave defect in the school system is that, owing to the overlapping between institutions, students are compelled frequently to change the place of education, often in the middle of the course. For example, a boy in a middle school must go on to a high school in order to complete the course for matriculation. Again, a boy who had passed matriculation from a high school must go on to a college (degree or intermediate) in order to complete what is in reality his school course. This frequent change of institutions gives little opportunity for character building.

A Reorganised School System

The Committee tried to remedy these grave defects by a readjustment of the system, so that each type of institution would be self-contained with a definite objective and a unity of aim, that no stage of education would be of less than three years' duration, and that an examination (formal or informal) would be held only at the end (and not in the middle) of each particular stage. The stages proposed were (i) a primary stage of five years; (ii) a secondary stage (vernacular and Anglo-vernacular) of four years; (iii) a higher secondary stage of three years; and (iv) a degree stage of three years.

The Committee hoped that, by the acceptance of these proposals, pupils would not be compelled, as now, to join an institution of a higher grade merely in order to attain the objective of the lower stage. They also hoped that, by reducing the length of the secondary stage by one year, not only would the new higher secondary schools be in a strong position to prepare boys for admission to the University at the age of about eighteen, but also that the many boys who have no bent for literary studies and who now clog the development of high schools would be released at an earlier age from these literary studies and be diverted either to work or to vocational institutions properly adjusted to the general scheme of education. " The money saved (by the elimination of these boys) could be better spent in the expansion of vocational training."

Decentralisation of Secondary Education

The Committee were also disturbed by the serious congestion of students in Lahore, and by the serious situation which has been created. Two thousand out of 3,250 intermediate students reading in Lahore colleges were from the mofussil or outside districts ; and as many as 2,400 out of 3,000 degree students had been drafted into Lahore from outside. The Committee hoped that this grave defect in the system would be reduced by a bold policy of mofussil development and by the creation of a number of higher secondary schools outside Lahore.

Government of the University

The Committee proposed a radical reconstruction of the governance of the University by means of a better distribution of powers and functions between the several authorities of the University. In this task they followed very largely the constitutions of the newer universities in India, but they were in obvious difficulty in making proposals regarding the composition of those bodies owing to the clash of communal interests. The Muslim community, which comprises a majority of the population, is still backward in university education ; there is little chance of Muslims being returned by election, voting being very largely on communal lines. The Committee had therefore to choose between two evils—the partial disfranchisement of certain communities and the partial introduction of a communal distinction. They chose the latter alternative on the ground that if " the University is to be responsive to educated public opinion, all communities should have reasonable representation." [1] They therefore recommended the reservation of seats in the graduates' constituency for a specific period of time, but they did not recommend that these representatives should be returned by separate electorates, as " such a practice would introduce a spirit of exclusiveness, which is inimical to the best interests of a university." Nor did they recommend that the practice of " reservation " should be introduced into the academic authorities of the University. Considerable powers of nomination should be vested in the Vice-Chancellor, who would use those powers (if necessary) to rectify serious inequalities between communities.

Conclusion

The prospects of the Punjab are by no means unpromising. Very rapid quantitative expansion has been made. In the sphere of primary education, the wisdom of concentrating efforts on the improvement of middle schools rather than on the multiplication of inefficient primary schools has already been justified ; the percentage of trained teachers in every grade is satisfactory ; the attempts to build up a suitable system of rural education are undoubtedly on right lines ; the scheme of physical training and recreation

[1] *Report*, page 353.

presents admirable features. Considerable improvement and expansion has been made in the higher stages of girls' education, but in rural areas it is difficult to see how rapid advance will be possible until a widespread system of co-education is introduced. Many of the colleges and high schools reveal a good level of efficiency, but future prospects depend very vitally on a reconstruction of the school system. The rapidly increasing number of students, many of whom are ill-fitted for university education, gives cause for considerable alarm. There is at present a temporary set-back owing to depleted finances, but the way should be prepared for the next advance.

G. ANDERSON.

CHAPTER THREE

MUSLIM EDUCATION IN INDIA

I. Disappointing Educational Progress among Muslims

IN the YEAR BOOK for 1932, Sir Philip Hartog gave a brief historical retrospect of modern education in India, and described its general administration and machinery. He also alluded to the peculiar position of Musalmans and gave statistics showing the course of their educational development. For the purpose of this article it is necessary to recapitulate some of those statistics as well as to add others.

Total Enrolment of Muslim Pupils

The Hartog Committee,[1] which sat in 1928–9, provided the following statistical table :

MUHAMMADAN PUPILS AND POPULATION WITH COMPARATIVE PERCENTAGES

PROVINCE	MUHAMMADAN PUPILS OF ALL INSTITUTIONS RECOGNISED AND UNRECOGNISED	1927 PERCENTAGE	
		MUHAMMADAN POPULATION OF TOTAL POPULATIONS	MUHAMMADAN PUPILS OF TOTAL PUPILS
Madras (2·8)[2] . .	278,568	6·7	11·0
Bombay (4·0) . .	209,913	19·6	18·1
Bengal (25·0) . .	1,140,140	54·0	51·3
United Provinces (6·5).	244,697	14·3	18·1
Punjab (11·5) . .	590,834	55·3	50·0
Burma (0·5) . .	24,776	3·8	3·8
Bihar and Orissa (3·7) .	144,911	10·9	13·1
Central Provinces (0·5)	37,920	4·1	9·5
Assam (2·2) . .	74,831	29·0	25·9
British India (59·4) .	2,821,109	24·1	25·3

These figures are generally satisfactory from the quantitative point of view. They show that, whereas in the Census of 1921 the Muslim population formed 24·1 per cent. of the total population of British India, in 1927 Muslim pupils formed 25·3 per cent. of the total number of pupils enrolled from all communities. Moreover, between 1917 and 1927 the number of Muslim pupils increased

[1] The Auxiliary Committee of the Indian Statutory Commission (The Simon Commission). Report, page 187, H.M. Stationery Office.

[2] These figures indicate the Muhammadan population in millions.

from 1,552,000 to 2,437,000, or by 62·5 per cent.; and in the matter of enrolment Muslims are advancing more rapidly than the population as a whole. This comparative rate of progress has been fully maintained in subsequent years. In 1930–1, the total number of Muslim pupils increased by 123,981, or by 3·8 per cent., as against an increase of 173,960 or 1·4 per cent. in the total enrolment of all communities. Indeed, in that year the number of Hindu pupils actually declined by 8,715.

Enrolment in Higher Grades

These figures of total enrolment, however, are unduly optimistic, and do not reveal the actual position of Muslims in India. A closer examination will disclose disquieting features. In his previous article Sir Philip Hartog pointed out that the large majority of Muslim pupils are enrolled in the primary classes, and that their quantitative position deteriorates in the higher stages of education. The truth of this criticism is confirmed by the figures given by the Hartog Committee. In 1927 Muslims formed 28·4 per cent. of the total in Class I; in Class V they formed only 17 per cent.; in the middle stage there were only 101,300 Muslim pupils, or 16 per cent.; in the higher stage only 31,950, or 13·5 per cent.; in the universities and colleges only 10,787, or less than 13 per cent.

The position in regard to Muslim girls is even more disturbing. In 1927 there were 312,700 Muslim pupils in institutions for girls, or 28 per cent. of the total. In Class I they formed 35·5 per cent. of the total, but in Class V only 5·8 per cent. There were only 1,669, or 5·1 per cent., in the middle stage, and 143, or 2·1 per cent., in the higher stage. In 1927 there were only 30 Muslim students in all in the women's colleges.

The Educational Commissioner with the Government of India has made similar deductions from more recent statistics: "The fact remains that the majority of Muslim pupils are still reading in the lower classes of schools. Out of a total of 3,357,479 Muslim pupils in all kinds of institutions, 2,074,928, or nearly 62 per cent., were in Classes I and II. A considerable number of the infants were enrolled in *maktabs* and *mulla* schools, while there were 257,418 pupils in unrecognised institutions, the great majority of which impart very little secular education. It is noteworthy that in the Central Provinces there was not a single Muslim girl in a high school or college." The Educational Commissioner then gave a valuable though depressing table (reprinted opposite), in which he removed from calculation pupils in Classes I and II and also those in unrecognised institutions.

These figures compare very unfavourably with those in the previous table. Whereas, according to the former table, the percentage of all Muslim pupils (boys and girls), to the total enrolment is 25·3 per cent., that of Muslim pupils in recognised institutions above Class II to the total enrolment is only 21·1 per cent. for boys and 11·5 for girls. The figures also show that in provinces in

PROVINCE[1]	PERCENTAGE OF MUHAMMADAN POPULATION TO TOTAL POPULATION		PERCENTAGE OF MUHAMMADAN PUPILS TO TOTAL NUMBER OF PUPILS	
	MALES	FEMALES	MALES	FEMALES
Madras . . .	6·7	6·7	8·7	7·3
Bombay . . .	20·8	18·6	15·2	12·2
Bengal . . .	54·6	55·3	37·1	34·3
United Provinces . .	14·9	14·8	15·5	10·4
Punjab . . .	56·2	56·9	42·8	23·7
Burma	4·9	3·1	5·5	2·4
Bihar and Orissa . .	10·8	11·5	9·8	11·7
Central Provinces . .	4·6	4·2	9·3	7·1
Assam	29·6	28·8	24·4	13·6
North-west Frontier Province . . .	90·9	93·0	71·6	24·9
British India . .	25·2	24·2	21·1	11·5

[1] *Education in India in* 1930–31 (Government of Indian Publication Branch, Calcutta).

which Muslims are in a large majority the percentage of Muslim pupils to the total number of pupils is much below the percentage of the Muslim population to the total population.

Wastage

The Hartog Committee also alluded to the very disappointing figures of Muslim pupils in the matter of class promotion ; and in his previous article Sir Philip Hartog was fully justified in stating that wastage is far higher among Muslims than among other communities. The following figures are instructive in this regard :

PROVINCE	MUHAMMADAN PUPILS IN CLASS I	HINDU PUPILS IN CLASS I	MUHAMMADAN PUPILS IN CLASS V	HINDU PUPILS IN CLASS V	MUHAMMADAN PUPILS IN CLASS VII	HINDU PUPILS IN CLASS VII
Bengal .	560,783	409,228	12,529	32,166	7,666	24,617
United Provinces	100,144	465,492	10,787	57,773	3,594	20,369
Bihar and Orissa .	70,795	435,685	1,993	27,438	973	11,201

Literacy

The Census literacy figures are equally disturbing. It is true that among all communities the number of literates by no means reflects the school attendance figures, the indication being that large numbers of school children never attain literacy ; but this dis-

appointing feature is far more prevalent among Muslims than among other sections of the community. The Census Commissioner in the Punjab has attributed this depressing result to the fact that Muslims are mainly agriculturists and therefore require the labour of their children at an early age before they have attained literacy. Their conditions of life in the villages are also such that relapse into illiteracy is very frequent; nor do they ordinarily pursue occupations in life such as would encourage them to attain literacy at a later age.

In spite of considerable progress in recent years the educational position of Muslims is therefore still unsatisfactory. It is necessary to examine the causes of this disappointment.

II. Muslim Apathy in the Past

The first half of the nineteenth century was a period of intellectual decadence in India. The old Moghul Empire, with its rich intellectual activity, had declined; and in its place arose a new and vigorous civilisation from the west, which was based on values, traditions and ideals different from those which found their expression in Indian life. The first, almost instinctive, reaction of the people towards these new ideas was one of repugnance and rejection, the forces of orthodoxy being arrayed against them. A not unnatural tendency grew up to take solace in the achievements of the past, and to cherish them as a compensation against the evils and inadequacy of the present. During this gloomy period of her history India shut her mind against research and originality of thought, while her learned scholars exercised their intellectual ingenuity in commenting upon old texts in Sanskrit, Persian and Arabic—languages in which their cultural and religious associations were enshrined. They thus sought the shelter of religious orthodoxy and regarded their established systems of Islamic and Hindu education as sacrosanct—systems which interpreted education as " religious " in the narrower sense, and removed from it the vitalising influence of those scientific and social studies which had been developed during the last two centuries.

Early British Policy

The earlier British rulers of India evinced no desire whatever to interfere in the religious and intellectual life of the country. Indeed, Warren Hastings consistently maintained that if British power was to be lasting it must become an Indian power—and that its greatest gifts would be those of order and justice, under which the ancient indigenous culture might revive and flourish. In pursuance of this ideal he established a Muslim College, or *madrassa*, in Calcutta, for the encouragement of traditional Muslim learning, while Duncan, the Resident at Benares, founded in that place a Sanskrit college with a similar objective for the encouragement of Hindu studies.

In the early years of the nineteenth century, however, other influences came into prominence. It is unnecessary to repeat the oft-told story of the struggle between Orientalists and Anglicists. Far more important to the present discussion is the outcome of that struggle, and the manner in which Hindus and Muslims reacted to new ideas. The outcome was decisive. First, Government maintained complete neutrality in matters of religion; second, available funds for education were to be devoted mainly to the support of schools and colleges in which Western learning would be taught through the medium of English.

Hindu Acceptance of English Education

After a comparatively short period of doubt and opposition, the Hindu community determined eagerly to grasp the advantages of the new openings and opportunities provided by English education. It was comparatively easy for them to do so for cultural and historical reasons. In their case religious education had been confined very largely to the Brahmins; the rest of the community were by no means opposed to a secular view of education. Moreover, during the long period of Moghul rule in India they had acquired the mental attitude and habits necessary for learning a new language and for using it as a medium of instruction. They could, therefore, conceive of education as an instrument for the strengthening of their worldly position, and as being adaptable to changed circumstances. The attractions of English education were subsequently developed by the decision of Lord Hardinge in 1844, that henceforward, in making appointments to Government service, preference should be shown to those who had received a Western education and had acquired an adequate knowledge of English.

Muslim Distrust

With Muslims the position was different. The Government of the country had but recently passed from their hands into those of the East India Company, and feelings of mistrust grew up between them and their new British rulers, particularly after the Mutiny of 1857. They also became alarmed by the activities of Christian missionaries, who were prominent among the early workers in the cause of English education, and they were suspicious that in furthering English education Government had subtle designs on their religion. They were also ill-disposed towards the very nature of English education. The substitution of vernacular for Persian in the lower courts and the adoption of English as the medium of instruction brought about an ever-widening gulf between them and those educational institutions which were so closely connected with recruitment to Government service. Moreover, they had been a ruling race for a thousand years, and during that period had always taken their culture with them: to Spain, Persia, Egypt and India.

It had thus been unnecessary to devote themselves to a study of other people's languages, except in so far as they acquired them in daily intercourse or for literary purposes. The opinions of the Council of Education established in 1842 are of interest in this connection ; they provide a refreshing antidote to Lord Macaulay's somewhat arrogant condemnation of Oriental languages and literature :

> " For letters for their own sake, no race of men has greater respect than the Muhammadans. The difficulty is not to induce the Muhammadans to cultivate the minds of their children, but to afford means of mental cultivation which they will accept as sufficient, while their children shall also be entitled to acquire a sound knowledge of English. In this respect the case of the Muhammadans differs widely from that of the Hindus ; and this, it is believed, is the true reason why the system of English education (which has been so successful with the Hindus) has failed with Muhammadans. . . . (There is) in the Persian language a body of literature of his own of which he (the Muslim) is justly proud, and for complete ignorance in which no foreign knowledge or no scientific attainment would be a compensation."

Muslims also looked askance at any system of education which was divorced from religion. In the lower stages of education, therefore, they confined themselves to the teaching of the Holy Quran, to Arabic and Persian, and to the bare rudiments of the mother tongue. In the higher stages they paid attention to the study and commentary of the Holy Quran and its philosophy, the traditions (*Ahadis*) of the Prophet and their authenticity (*Ilm-ur-Rijal*), together with a study of religious jurisprudence (*Fiqh*), some formal logic and philosophy and, often, a smattering of the traditional system of medicine (*Tibb*). From the outset, therefore, they became backward in adapting themselves to Western education.

III. Segregate Institutions

The main reason, therefore, why Muslims have held aloof from the Western system of education, especially in the early years of British rule, is that of loyalty to their traditional learning and religion. The extent to which they still continue to do so is shown by statistics.

" *Separate* " *and* " *Special* " *Schools*

The Hartog Committee[1] distinguished between " separate " and " special " institutions. The former category includes Islamia colleges, which prepare for the ordinary university examinations ; and Islamia secondary schools, which prepare for matriculation. In certain provinces it also includes Islamia primary schools, many of which are maintained by the district authorities. For example, in Bombay Presidency these primary schools are of two kinds : the Urdu-vernacular schools, in which Urdu is used as the medium of

[1] *Report*, page 194.

instruction in all subjects, with the local vernacular, in addition, as an optional subject; and the vernacular-Urdu schools in which all instruction is given in the local vernacular with Urdu as a compulsory extra language. The " special schools " comprise an extensive network of Islamic *maktabs*, *madrassas* and Quran schools, and *Mulla* schools in Sind, culminating in the higher institutions of Oriental learning such as those of Nadwa, Deoband and Lucknow. These latter institutions are concerned with the study of Arabic, Persian and theology, as well as with other older disciplines, such as logic, metaphysics, rhetoric and religious jurisprudence.

Popularity of Segregate Muslim Schools

A very large proportion of Muslim pupils still attend these segregate institutions, whether " separate " or " special," instead of the ordinary schools of the country. In 1927, according to the Hartog Committee, 663,000 out of 1,109,000 Muslim pupils in Bengal attended schools of these types. In Bombay Presidency (excluding Sind, where *Mulla* schools provide an equivalent), 85,000 out of 120,000 Muslim pupils in primary schools were enrolled in " separate " institutions. In Bihar, 86,000 out of 135,000 Muslim pupils in all institutions were reading in " separate " or " special " institutions.

The number of these schools of varying types, as given by the Hartog Committee,[1] is astonishing :

" SEPARATE " AND " SPECIAL " INSTITUTIONS FOR MUHAMMADANS

PROVINCE	" SEPARATE " INSTITUTIONS			" SPECIAL " INSTITUTIONS		OTHER SCHOOLS	TOTAL RECOGNISED INSTITUTIONS	UNRECOGNISED SCHOOLS	GRAND TOTAL
	COLLEGES	SECONDARY SCHOOLS	PRIMARY SCHOOLS	MADRASSAS	MAKTABS				
Madras .	2	17	3,166	—	67	12	3,264	783	4,047
Bombay .	—	13	2,061	—	827[2]	39	2,940	808	3,748
Bengal . .	4	25	—	538	19,919	6	20,492	804	21,296
United Provinces .	2	18	693	—	2,294	—	3,007	not known	3,007
Punjab .	1	65	308	—	—	—	374		374
Burma . .	—	7	178	—	—	4	189	89	278
Bihar and Orissa .	—	—	—	—	3,477	14	3,491	280	3,771
Central Provinces .	—	37	242	—	—	1	280	23	303
Assam . .	—	—	—	10	102	0	112	205	317
	9	182	6,648	548	26,686	76	34,149	2,992	37,141

[1] *Report*, page 196.
[2] These are Mulla schools in Sind.

Disadvantages of " Separate " Schools

The question arises whether Muslims are not seriously penalising themselves by their continued support of these segregate institutions and by their consequent neglect of the ordinary schools and colleges. There are, first, the purely communal schools (by no means confined in number to the Muslim community), which prepare pupils and students for the ordinary university examinations, but are very largely attended and staffed by members of a particular community. There is much to be said on behalf of these institutions; had it not been for the Islamia schools and colleges, the educational position of Muslims would have been worse even than it now is. But a number of them are far from efficient, due sometimes to financial and sometimes to personal reasons. This condition of inefficiency is certainly a feature of the separate Islamia primary schools, which are mainly of the unsatisfactory single-teacher type owing to the small number of pupils attending them. There are also grave disadvantages in children of a particular community being educated in an exclusive, or largely exclusive, environment, where they are deprived of opportunities of contact and competition with children of other communities. This is an objection which applies as strongly—if not more so—to Hindu and Sikh schools in the Punjab as to Islamia schools.

There is a growing feeling among Muslims that, except where local circumstances specially require it, the further multiplication of exclusive communal institutions should be checked; that the resources of the community should be concentrated on the improvement of existing schools which justify encouragement, and on the assistance of poor Muslim pupils reading in the ordinary schools; and that, as far as possible, children of all communities should be educated in common schools, where they may develop a spirit of tolerance and goodwill. It is also suggested that existing communal institutions should admit a certain number of pupils from other communities; that Muslims should avail themselves to the full of the opportunities and facilities provided in Government institutions; that they should not strive to entrench themselves mainly in segregate Muslim schools and colleges. These modern and more tolerant ideas have received much support in recent years from resolutions passed at sessions of the All-India Muslim Educational Conference, which is the largest educational organisation of Indian Musalmans and has been a close ally of the Aligarh movement for about fifty years.

Problem of " Special " Schools

It is more difficult to discuss, and still more to solve, the problems arising from the wide support given to the " special " schools, especially in Bengal. This system of education, which is generally known as *Nizam-i-Qudim*, has many admirable features in its organisation—its freedom from red-tape, its informality, its strong

religious background, its intimate association with people who are devoted to a selfless pursuit of knowledge and do not place education on a commercial basis—but it has lost its vitality and has degenerated into a mere passive imitation and absorption of views of early commentators, failing to adapt itself to the changed circumstances of life and thought. Formal, instrumental studies such as grammar and logic occupy foremost attention, while important and living studies such as history and philosophy have been relegated to the background.[1] Schools of this type also are in no way adjusted to the ordinary scheme of education. A very large number of Muslim boys and girls spend several years in *maktabs* and Quran schools acquiring a sufficient knowledge of Arabic to read the text of the Quran (without understanding it), with the result that even those few who join later the junior classes of the ordinary primary schools are seriously handicapped.

Many attempts have been made, though with disappointing results, to bring these " special " schools more into line with modern thought and requirements. What is needed is an integration of these different types of elementary school into a simple co-ordinated system, partly by providing instruction in Quran, where required, in the ordinary public schools, partly by utilising the thousands of *maktabs* and Quran schools for instruction in the three R's and other useful subjects. At the higher stages the problem is different and even more perplexing ; namely, to enrich, on the one hand, the Oriental institutions with modern methods and modern studies, and, on the other hand, to introduce into the secondary and higher English institutions that thoroughness and accuracy of knowledge towards which Orientalists have always aspired. These problems are doubtless difficult of solution, but it is essential, not only in their own interests, but also in the interests of India, that Muslims in largely increasing numbers should join and take advantage of the ordinary schools of the country. Muslims have a great contribution to make towards the development of India and the fullest benefits of that contribution should not be withheld any longer.

IV. The Adaptation of the Ordinary Schools and Colleges in India to the Needs of Muslims

Muslims in large numbers still abstain from attending the ordinary schools and colleges in India, to some extent because of loyalty to their own indigenous institutions and to their traditions of learning ; but this is not the only reason. It must be conceded that, in many respects, the educational systems of India are uncongenial to Muslims. It is also unfortunate that Government has hitherto striven to meet the needs of Muslims by giving subsidies to the " special " or indigenous institutions, rather than by adapting the ordinary schools to meet their requirements. There can be no

[1] *Vide Essays of Shibli*, a great Muslim historian of the last century, page 283.

doubt that, if Muslims are to be weaned towards more modern conceptions of education, the present system of education in India must be subjected to drastic alteration.

The Place of Religion in the Schools

First and foremost, far better provision must be made for religious education. The attitude of State neutrality in India towards different religions originally took the form of excluding religious teaching from all publicly managed schools. In recent years attempts have been made to mitigate this policy of exclusion. In 1921 the Government of India addressed all local Governments on the subject of introducing religious instruction into Government schools, and stated their "opinion that the embargo which had hitherto been placed on the introduction of religious education in publicly managed schools might be removed." Certain efforts were made to comply with the spirit of these suggestions, but the results have been generally disappointing. The Hartog Committee [1] were impressed by the necessity of further development:

> "The way is therefore open for provincial governments, who are embarrassed in their endeavour to secure the better education of Muhammadans by their demand for continued religious and secular instruction in the same institution, to consider whether they should not try to meet that demand in the ordinary school. It is obvious that, if the system of primary education is to be rescued from the waste and ineffectiveness which afflict it, a great effort has to be made, and the system of primary schools has to be reorganised. For that purpose it is of the first importance to decide whether the relatively ineffective and expensive plan of maintaining segregate schools for Muhammadans shall be continued, or whether arrangements for providing them with opportunities for religious instruction and observance in the ordinary schools shall be adopted. There can be no doubt that, if such arrangements can be made as will induce that community to send its children to the ordinary schools, the public system will gain both in economy and efficiency, and much will be done to free the community from the handicap and reproach of educational backwardness."

The granting of such permission would certainly induce some sections of Muslims to resort in larger numbers to public schools, but it will not constitute a satisfactory arrangement for religious teaching, unless the keen and enlightened support of the community is actually obtained. As a rule this teaching should be provided, not by the ordinary teachers in the regular service of public institutions, but by carefully selected persons in whom the community has faith and confidence. All through the centuries Muslims have placed the highest value on the personality of the teacher, who should not merely be the instructor of youth, but their guide and inspiration towards a better life. It must be clearly understood, however, that the need will not be met by the appointment of conservative, narrow-minded *maulvis*, out of sympathy with modern thought, and content to teach obsolete notions of theology, which would be at

[1] *Report*, page 204.

variance with the scientific and social studies pursued in the adjoining classrooms. In any case, the system devised for the purpose should possess sufficient elasticity to allow room for local variations and for the expression of local needs and sentiments.

The Inadequacy of Village Schools

Another important matter for consideration in this connection is that the vast majority of Muslims reside in rural areas, where they pursue their ancestral calling of agriculture. To the criticism of village education contained in the chapter on British India in Part II, Section I of this volume (page 362) may be added a further quotation from a recent book [1] there mentioned :

> " From an educational point of view one of the most serious evils of the whole system of university education and of the high-school education which precedes it is the dissociation which it produces among the great mass of the students between their college life and their home life. The founders of the system had confident expectation that in a few years the ideals of the universities and the schools would become the ideals of the communities from which the students come ; but that hope has not been fulfilled. Higher education has created a wide gulf between the intelligentsia and the mass of the people, a gulf which has grown wider and wider as the years go by. How to reverse the process, how to bridge the gulf, is perhaps the most important question that educationists in India have to face."

The writers of this book went on to plead for—

> " a great development of higher education in the villages, guided and inspired by men and women who devote their lives to the study of village conditions and the life and thought of the village folk. We look forward in the future to village universities, rooted in village life, with a curriculum of sciences and branches of knowledge that bear on village life and industry, with tutors and students who have their outlook on the villages and are inspired by the same purpose."

This neglect of vernacular education in the villages is particularly unfortunate in the case of Muslims, who are predominantly agriculturists. In some provinces, notably in Bengal and Bihar, not only is the teaching in the primary schools most inadequate and ineffective, but the village schools contain so few classes or standards that literacy can scarcely be expected even from those pupils who complete the course. For example, the Hartog Committee recorded that in Bengal, out of 52,809 primary schools, as many as 40,184 were of the single-teacher type, where the teaching is usually most ineffective, while 39,000 were schools with only three classes in each, where even the best pupils can scarcely be expected to attain literacy. Thus, Muslim agriculturists in Bengal possess very scanty opportunities for providing their children with good primary education in the vicinity of their homes.

[1] *Christian Education in India*, by Sir George Anderson and Bishop Henry Whitehead (Macmillans), page 30.

Decay of Vernacular Middle Schools

Even more serious is the decay in most provinces of vernacular middle schools, dealt with in Chapter One of this Section. Not only should these schools become the rallying-points of progress in village life, but the very improvement of primary schools is dependent upon them. Unless competent recruits, who have completed the vernacular course, are available for admission to the vernacular training institutions, the primary schools will continue to be the happy hunting-ground for the discontented and ill-educated derelicts from English education in the towns. This is " the vicious circle " to which the Hartog Committee alluded :

> " There is little hope of real progress in primary education unless a definite break is made with the policy of inconsiderately multiplying schools and of hastily improvising new ineffective arrangements for training the additional teachers required. Effective arrangements for training vernacular teachers must, generally speaking, precede the expansion of primary schools ; and the training of vernacular teachers itself depends upon a good supply of recruits from the vernacular middle schools. Hence money spent on expansion and improvement of vernacular middle schools and on vernacular training institutions will yield a larger and more permanently fruitful return than money spent on almost any other of the many objects which are dear to the heart of the educationist."

The table printed on page 364 shows that the condition of rural education is extremely unsatisfactory in many provinces, notably in Bengal and Bihar. In the former province the number of vernacular middle schools is insignificant ; in the latter the number of such schools is not only inadequate but, as was pointed out by Sir Philip Hartog in the last YEAR BOOK, " the process of converting vernacular middle schools into middle English schools was continued at the rate of forty schools per annum." Thus, not only is it impossible to staff the primary schools with suitable and capable teachers in these provinces, but the children of those residing in rural areas possess very inadequate facilities for continuing their education after completion of the primary stage (which, in most places, is confined to three classes). Muslim agriculturists, in particular, are seriously handicapped. These are mostly poor and find it difficult to send their sons to distant schools ; and even these are of the English type, which is unsuitable to their requirements, and are often in an uncongenial environment. In these circumstances there can be little wonder that many Muslims still hold aloof from the normal system of education, and that as a community they demand a reconstruction of rural education.

The Supply of Muslim Teachers

As already stated, Muslims attach great influence to the personality of the teacher, and therefore, not unnaturally, demand that the proportion of Muslim teachers in Government and other institutions

should be increased considerably. The Hartog Committee [1] rightly pointed out that " in staffing the schools and in selecting candidates for training, account must be taken not only of the knowledge and intellectual attainments of the candidates, but also of their personal suitability for the work of the schools. As in rural schools it is very important that the teachers shall be well acquainted with the conditions of rural life and be sympathetically disposed towards it, so in mixed schools, which include groups of pupils of very different and sometimes antagonistic social and religious traditions, it is very important that the staff should be so composed as to command the confidence of all groups and to assure them of fair play and sympathy." The Committee therefore recommended that larger numbers of Muslims should be admitted to the several training institutions, and that the control of these arrangements should be retained by Government.

It must not be assumed, however, that Muslims have been entirely apathetic towards Western education because, in the first place, they remain loyal to their own indigenous culture, and because, in the second place, the scheme of Western education, as interpreted in India, is largely unsuitable and uncongenial to them. Far from it. In recent years Muslim boys and girls have been attending the ordinary schools in ever-increasing numbers, and many of them have acquitted themselves creditably in the higher branches of education. In the Punjab, for example, where serious efforts have been made to meet their requirements, the number of Muslim scholars advanced from 241,743 in 1922 to 533,567 in 1927.

Muslims have also striven to make their own distinctive contributions towards the improvement of the educational system and towards a proper synthesis of the ideals of East and West. We shall now consider two of the more important of these contributions.

V. The Aligarh Movement

It was after a useful and many-sided public career extending over thirty years (1837–70)—in which he worked for the social, political and educational amelioration of his countrymen, irrespective of their religion, and also enriched vernacular literature by his valuable writings—that Sir Syed Ahmad Khan turned his undivided attention to the needs of his own community. He was faced by a two-fold danger. On the one hand, forces of obscurantism and conservatism, masquerading under the name of religion, were at work to reject Western knowledge and science; on the other hand, the education provided by Government was not only secular and " godless," but also avowedly and narrowly utilitarian in its scope. There was no other alternative to the aspirant for education—he had either to be content with the narrowly religious education of olden days, which failed to adjust him to modern life and its problems; or he had to fall back upon Western education, which, as then inter-

[1] *Report*, page 205.

preted in India, repelled him and was out of harmony with his religion and culture.

Ideals : Indian Education Organised by Indians

Sir Syed Ahmad's distinctive contribution to the educational problem was the conception that Indians in general, and Muslims in particular, should organise their education in the light of their own special needs ; that they should so relate education to the problems of life that they would be fired with a new purposeful vitality, then so lacking in them. To him the intellectual and moral decline of his community was an even more serious misfortune for India and Islam than the loss of political power or material resources ; and he looked upon a sound system of education as an effective instrument of intellectual renaissance. His first struggle, therefore, was against the forces of reaction. He reminded his opponents that, in its early days of glory, Islam had stood as the champion of science and intellectual freedom ; that the acquisition of knowledge, ancient and modern, secular and religious, was in every way consonant with the spirit of Islam. He recalled to them the dark ages in Europe when Muslims had kept alight the torch of learning ; it was now the turn of Europe to repay her debt to Islam. With such arguments he compelled his co-religionists to re-examine their position towards modern knowledge. Orthodox prejudices were also weakened by the spur of economic necessity. Parents were therefore urged to send their children to school and college in order to acquire English education, without the benefit of which they were being ousted all too quickly from the professions and services of the country.

A Muslim University

Sir Syed was not content, however, with this destructive and negative achievement, great though it was, of breaking down the forces of prejudice and opposition. He was by no means satisfied with the type of education then imparted in Government institutions, because it lacked two essential elements—the element of religion and the element of national culture. He therefore set to work, with the assistance of his talented son, Mr. Justice Syed Mahmood, to prepare a scheme for the establishment of a Muslim university, which would be free from Government interference and would have the requisite funds and authority to enable it to develop along its own characteristic lines. He was unfortunately frustrated in carrying out this scheme by the unacceptable conditions imposed by Government and also by the utilitarian predilections of the people, who thought more of material prospects than of an Islamic renaissance. A more modest beginning was therefore made in 1875, when a school was established at Aligarh. That school has since developed, first into a first-grade college which occupied a unique position in the educational life of the country, and later into a separate university in 1920.

Harmonising of East and West

The Aligarh movement was the first great attempt in educational self-help on the part of any community in the modern history of India. It was founded on the belief, as old as it is valuable, that no Government by itself can solve the educational problems of a people. It tried to interpret the problem of Muslim education from the point of view of their special circumstances and cultural history, and to harmonise the best elements of East and West in a single integrated scheme—in Sir Syed's own picturesque words : " Philosophy will be in our right hand ; natural sciences in our left ; and the crown of religion will adorn our heads." The Aligarh movement therefore stressed—theoretically, at any rate, for practice always falls short of theory—assimilation rather than imitation of the West, adaptation rather than adoption of Western institutions.

Religion

The second contribution of the movement was the due recognition of the place of religion in education. It has been the characteristic view of all Eastern peoples that no education can be truly successful, in the sense of being able to transform the life of a people and to tap the deeper spiritual sources of their being, which is not based on religion—not on dogma or theology as such, but on the religious spirit and attitude of mind. The system of English education in India could not but be secular, because of difficult and peculiar circumstances. For that very reason it had failed to command the respect and loyalty of the people ; it appealed only to their narrow utilitarian interests. The Aligarh movement, while accepting English education, gave religious education its due place ; and it is directly the result of this movement that religious instruction is to-day, in an imperfect form perhaps, a prominent feature of all Muslim educational institutions in India.

Character

Another distinctive contribution of the Aligarh movement was an explicit recognition of the need for the training of character side by side with the training of the intellect, and the provision of an environment suited to the attainment of this objective. The ideal which Aligarh had in view was not so much intellectual proficiency or research as the production of " gentlemen," well disciplined in mind, body and character, trained for social and public life and leadership. The corporate and residential life at Aligarh—with its clubs and societies for study and sport, with its insistence on certain standards of living and conduct, with its demand for punctuality, discipline and ordered freedom, with its uniformity of dress, with its free social intercourse, inter-dining and inter-living—exercised an irresistible influence on the character of its alumni. The conception of character which inspired all these activities was much wider

and more comprehensive than what was usually accepted at the time. Besides stressing the importance of social training, it attached great importance to games and healthy exercise. This move was particularly opportune, because Aligarh was founded at a time when the qualities of physical endurance, activity and enterprise were conspicuously lacking and when a general lassitude and depression threatened to stifle all joy of life among the youth of the country.

Tolerance

The Aligarh movement also stood for a spirit of tolerance. Muslims established friendly relations with their European professors and their Hindu fellow-students. They developed a broad and tolerant outlook, which scorned to limit itself by narrow sectarian, provincial or religious prejudices.

Thus the Aligarh movement may be summed up as an educational movement in the widest sense of the term ; based on the principle of self-help ; wedded to the task of the general awakening and reform of Muslims ; widely tolerant in its outlook ; intimately concerned with the development of character, in which physical and social fitness and personal self-respect are important elements ; aiming at a synthesis of Eastern culture with modern knowledge ; permeated by the spirit of religion.

VI. Osmania University, Hyderabad

In discussing the implications of the Aligarh movement, nothing has yet been said about the medium of instruction—a problem which, by virtue of its far-reaching educational and cultural repercussions, was bound to assume an ever-increasing importance.

The Language of Instruction

Sir Syed Ahmad Khan's attitude in this matter was based on a contradiction which he and his supporters did not sufficiently realise. On the one hand, he keenly supported the progress of the vernaculars and ancient classics ; and few Muslims have done more to enrich their mother tongue. By the establishment of the Scientific Society for the translation of standard works of foreign languages, by his earlier advocacy of a vernacular university, by the inauguration of an Oriental Department in the college at Aligarh, where instruction was imparted in Urdu, he blazed a trail for those who have subsequently attempted to make the vernaculars the repositories of modern knowledge and science. On the other hand, he resolutely opposed all attempts to make the vernaculars the media of instruction ; he insisted that India's intellectual progress would be penalised irrevocably if higher education were not imparted through the medium of English. He was under the impression that the vernaculars were insufficiently developed to serve as media of higher education, and went so far as to hazard the

opinion—which is strangely out of harmony with his general attitude and outlook—that " education imparted in Urdu will not cultivate intelligence, lucidity of ideas, and force of expression."

Defects of English as a Medium

In this attitude there is an unrealised confusion of two distinct issues. There can be no doubt that the educational salvation of Muslims—as of all other Indians—imperatively demanded intimate association with Western sciences and modern studies. Without this infusion of new blood they would not only have been deprived of their place in the services and administration of India ; they would also have suffered grave intellectual decay. Nor is there room to doubt that, in the present political and economic conditions of India, English is obviously the natural means of communication with the Western world. But this is very far from maintaining that all secondary and university education should be conducted through the medium of a foreign language. The experience of the last hundred years has demonstrated clearly the immense educational and cultural waste implied by that practice. The standard of achievement in Indian schools and colleges has been deplorably low. The acquisition and mastery of a foreign language presents such difficulties that the vast majority of students, who are not linguistically gifted, cannot possibly apply their minds to the actual subjects of the curriculum nor study them widely or extensively, but must be content to memorise a few textbooks and " notes." Thus at the examinations and elsewhere they work under a dual inhibition—poverty of knowledge and difficulty of expression. This depressing fact has been somewhat obscured and belittled, because there are a number of Indians who can express themselves with remarkable fluency and felicity in the English language, but it should be remembered that for every prize-master of English there are tens of thousands of students whose expression remains fettered and whose minds are unopened in consequence of the use of a foreign medium.

The Potentialities of Urdu

Another result of the foreign medium has been the divorce between the educated section of the people and the literature of their mother tongue. Most educated people in India devote their time and attention to the study of English, and tend to look down upon indigenous literature as necessarily inferior and unworthy of their serious devotion. Save for a few honourable exceptions they have done little to enrich their mother tongue with new forms of expression or new knowledge. Thus the natural process of its development has been arrested. It is a remarkable tribute to the living genius and the possibilities of growth latent in Indian languages that, in spite of this serious handicap, they have continued to flourish ; particularly so Urdu, thanks to the cultural and sentimental attachment of the Muslim masses to their *lingua franca* and to the

devoted service of certain individuals and associations. The result is that Urdu is to-day the most highly developed, the most elastic and the most flexible of Indian languages, enriched with the generous contributions which it has received from many of the classical and modern languages of East and West.

Foundation of Osmania University

The development of Urdu had lacked so far the stimulus of being the medium of higher education and of association with modern studies at the university stage. There was no imperative call for writers and scholars to publish their academic works in Urdu, no educational situation demanding the translation of standard works from Western languages, no adequately endowed and organised institution to undertake this work. This great educational need has been supplied by the inauguration of the Osmania University of Hyderabad. In the course of a memorandum submitted to Government, Sir (then Mr.) Akbar Hydari, as Home (Judicial, Police, Medical and Education) Secretary to Government,[1] developed the reasons which led him to recommend the foundation of such a university, reasons which have been briefly stated above. He also referred to the two possible objections that might be urged against the selection of Urdu as the medium of instruction in the proposed university: first, that the majority of the people spoke other languages, and secondly, the absence of good books in Urdu.

As to the first, it was pointed out that, although it was true that those whose mother tongue is Urdu are in a minority, yet it is one of as many as four vernaculars prevalent in the State, and is the cultural and official language of the State and of polite society, and is generally spoken by those classes from which students proceeding to a college course are drawn.

Sir Akbar Hydari met the second objection by stating that if a Bureau of Compilation and Translation were attached to the University, books required for college classes could be produced in a short time. His opinion has proved to be well founded, as the Bureau of Translation has, during a short period, produced almost all the books required as textbooks for the Intermediate and the B.A. classes and is engaged in the translation of books on law, medicine, engineering and those required for M.A. and M.Sc. classes.

Acting on this memorandum the University was created by a firman of His Exalted Highness the Nizam in 1919 with the object of imparting education in arts, science and technology up to the highest standard through the medium of Urdu, with English as a compulsory second language. It is not essentially a Muslim university, but the university of a Muslim state, which is open to all its subjects. It takes a rightful place in this chapter, partly because its medium of instruction is the *lingua franca* of Indian Muslims.

[1] Now the Finance Member and leader of the Hyderabad Delegation to the Round Table Conference.

The words with which H.E.H. the Nizam inaugurated the University may well be quoted here :

> " I am pleased to express my approval of the views set forth in the Arzdasht and the memorandum submitted therewith[1] regarding the inauguration of a university in the state, in which the knowledge and culture of ancient and modern times may be blended so harmoniously as to remove the defects created by the present system of education, and full advantage may be taken of all that is best in the ancient and modern systems of physical, intellectual and spiritual culture. In addition to its primary object to diffuse knowledge, it should aim at the moral training of the students and give impetus to research in all scientific subjects. The fundamental principles in the working of the University should be that Urdu should form the medium of higher education, but that a knowledge of English as a language should at the same time be deemed compulsory for all students."

The University has developed along the lines thus laid down. The first constructive work was the establishment of a Bureau of Translation, which has undertaken, in collaboration with a number of distinguished Oriental scholars, the difficult task of devising technical terms used in the different services. Much of this work has already been completed. About 360 standard books have also been translated into Urdu, dealing practically with the whole range of university studies—history, philosophy, economics, mathematics, physics, chemistry, botany, zoology, medicine, law and engineering, thus enabling the University to undertake teaching up to the highest standard in all its faculties. Another important institution associated with the University is the Oriental Publications Bureau, known as the *Dairat-ul-Marif*, which edits and publishes rare Arabic books not available in print. The services rendered by this institution to the cause of Arabic learning have been recognised, not only in Islamic countries, but also by European Orientalists. Expansion has also been going on in the University proper, which originally had only an Arts College, but provides instruction now in law, medicine, theology, engineering and pedagogy. It has four intermediate colleges in the districts affiliated to it, and an interesting new development has been the establishment of the Zenana College as a full-grade college for women. The total number of students in the different faculties of the University is 832, and the annual expenditure on the University and its allied institutions is Rs. 14 lakhs in British Indian currency (£105,000).

The University has now passed out of the experimental stage into an established fact of great educational significance. The reports of the examiners show that the standard of its answer papers, even in highly technical subjects like medicine and engineering, is certainly as good as, and in certain subjects better than, that of other universities. But the real success of this, as of all universities, is to be measured, not in terms of examination results but in the release of creative capacity, of which there are already promising

[1] By Sir Akbar Hydari.

indications in the literary output of the students. The University cannot subsist for ever on translations alone; it must encourage and arrange for the publication of original works and seek not only to enrich the Urdu language, but also to release the sources of creative thought and expression. The stage has been set, however, for this great advance. To the degree that this and other universities, prompted by its example, bring education nearer to the life and culture of the people, they will help forward the movement of intellectual renaissance.

VII. Conclusion

This brief survey of the various movements of Muslim education reveals not only the variety and immensity of the problems involved, but also the different aspects of the community's educational development. The Muslim contribution to the educational thought of the country may, broadly speaking, be summed up as follows. It has accorded a definite recognition and assigned its due place to religion in education; it has vindicated the claim of national culture; it has established both the necessity and the possibility of synthesising the knowledge of East and West; it has given to the country a lead towards the vernacularising of education in all its stages. It has also sought to re-establish the relation of education to the life of the people by including within the purview of its activity the popularisation of knowledge, the publication of books, and the association in diverse ways of the people with the university. These have been the ideals inspiring the various movements of Muslim education. In actual practice they have often fallen far short of these ideals, and have sometimes been content merely to imitate what obtains elsewhere. The effectiveness of Muslim education will be determined by its success in eschewing all narrowness of vision and sectarian prejudices, and in effecting a synthesis between the cultural values and traditions of Islam and the demands of worthy Indian citizenship, both being brought into harmony with the fundamental principles which govern all educational activity.

K. G. Saiyidain.
G. Anderson.[1]

[1] In respect of Sections I–IV.

CHAPTER FOUR

Education in Mysore

MYSORE is one of the leading Indian States, and it stands second in respect of population (6,423,189), and third in respect of area (29,312 sq. miles) and revenue (Rs. 3,37 crores). Of this revenue a large proportion is spent on education. On the Budget estimate for 1932–3 the expenditure on education totalled Rs. 51,94,000,[1] of which Rs. 3,10,000 was met from contributions by local bodies. The people of the country are mainly Hindus, but there is a considerable population of Mahomedans (370,003). The chief language spoken in the State is Kannada, a branch of the Dravidian family, but the Mahomedans mainly speak Urdu, while a small proportion of the population speak Telugu and Tamil. The diversity of languages is reflected in educational organisation. Separate schools are instituted in the earlier stages in which instruction is given in Urdu, and in a few cases in Telugu and Tamil. The census figures for 1931 show that the percentages of literacy for men and women are 14·6 and 2·5 respectively, the general percentage being 8·7.

The School System

The several grades of education are :

1. *The Primary stage of four years ;* but some schools, known as Privileged Primary Schools, provide instruction for a further period of two years, and prepare candidates for a public examination. Instruction in these schools is entirely in the vernacular.

2. *The Middle School stage of four years*, where English is taught as a compulsory first language, in addition to the mother tongue of the pupil, history and geography, arithmetic and an additional subject. Pupils who have passed through four years of the primary stage are admitted to the first-year class, while those who have completed the six years' work are admitted to the third-year class. The close of the middle school work is marked by a public examination.

3. *The High School stage of three years*, during which instruction is entirely in English except in regard to the mother tongue or its alternative, a classical language. As will be pointed out later, attempts are being made to use the vernacular as the medium of instruction at this stage. Candidates who have completed the three years of high school work are presented for a public examination known as the Secondary School Leaving Certificate (S.S.L.C.) examination.

[1] 100,000 rupees (1/6) = 1 lakh = £7,500 ; 100 lakhs = 1 crore. Rs. 51,94,000 = 51 lakhs and 94,000 rupees.

4. *The University stage.* There is, first of all, a two-year Intermediate course which all candidates must complete before appearing for the Intermediate examination. Those who are successful in the examination can proceed, according to the subjects they have studied during the course, to degrees in arts, science, medicine and engineering.

Corresponding to the stages in general education, there are vocational or technical courses of three grades, which will be described in due course.

Controlling Agencies

The controlling agencies fall into three groups: the University administration, the Department of Public Instruction and other Departments.

The organisation of the University will be described later. Departments other than the Department of Public Instruction which deal with education are the Departments of Industries and Commerce and of Agriculture. The former administers industrial and the latter agricultural schools.

The Department of Public Instruction

The Department of Public Instruction is concerned in the main with general education, though it also controls certain institutions of a technical character. At the head of the Department is the Director. The State is divided into two " divisions " and eight " districts " for educational administration, the latter of which correspond to the revenue divisions. Each division is administered by a Deputy Director, and each district has a District Educational Officer. Each district is further divided into " ranges," and each range is placed under an Assistant Inspector who has on an average about 140 primary schools to administer and inspect. There are, besides, Assistant Inspectors for Urdu Education, one for each district, and two Inspectresses for Mahomedan Girls' Schools, as these are " purdah " institutions which men may not inspect. There is also a separate officer whose function it is to inspect the Sanskrit Schools and Colleges in the State. There is a Superintendent of Practical Instruction who deals with handicraft in the general schools, and an Agricultural Inspector who inspects agricultural work in the general schools. There were till recently two Inspectors of Physical Education, but the posts are held in abeyance on account of financial stringency.

At the head office, in addition to the usual office organisation, there is a senior officer of the same status as the heads of the divisions mentioned before, whose function is to relieve the Director of the greater part of routine. There are also several bodies which help to focus the work of the Department in the respective branches: the Secondary School Leaving Certificate Board, the Local Examinations Board, the Board of Commercial Examinations, the Board of

Sanskrit Studies, the Textbook Committee, the Mahomedan Education Advisory Committee and the Women's Education Advisory Committee. As the names indicate, these bodies deal with the respective branches of education, and the first four also control departmental examinations that fall within their purview. The Textbook Committee, which functions through numerous sub-committees, examines the books submitted to it for prescription as textbooks.

Primary Education

The following statement gives the number of primary schools in the State for various years, number of pupils and the amounts spent on primary education :

YEAR	NUMBER OF PRIMARY SCHOOLS	PUPILS	EXPENDITURE RS.
1924–5	6,148	247,803	16,53,208
1925–6	6,165	252,262	18,93,347
1926–7	6,363	259,846	19,94,710
1927–8	6,336	259,306	20,13,011
1928–9	6,381	254,924	19,56,339
1929–30	6,455	262,272	20,17,340
1930–1	6,395	254,259	20,68,173
1931–2	6,199	242,241	22,07,125

NOTE.—The recent reduction in the number of schools is due in part to the abolition of night schools for adults which were not working satisfactorily, and in part to the amalgamation in a number of places of girls' schools with schools for boys.

In regard to primary education, Mysore presents the same features and the same problems as the rest of India. A considerable proportion of children of school-going age are yet outside the schools, and it is calculated that only about 60 per cent. of those who ought to be in are in schools at the present time, and even of those who enter the primary schools a considerable number stagnate, while the wastage is considerable, as the following statement will show :

Boys

I CLASS 1928–9	II CLASS 1929–0	III CLASS 1930–1	IV CLASS 1931–2
127,940	43,193	32,730	21,901

Girls

I CLASS 1928–9	II CLASS 1929–0	III CLASS 1930–1	IV CLASS 1931–2
22,662	5,700	3,142	2,734

Local Responsibility in Education

In order to place primary education on a satisfactory basis as well as to obtain the full co-operation of the people, the Elementary Education Regulation was passed in 1930. Its main purpose is to

obtain the co-operation, administrative and financial, of local bodies in administering the existing primary schools and in preparing a ten-year expansion scheme on a voluntary basis and subsequently a programme of compulsory primary education. Under the Regulation, control of primary education in each district of the State, as well as in large municipal areas like the cities of Mysore, Bangalore and Tumkur, as well as in the Kolar Gold Fields area, which was till now vested in the Department, has been transferred to the District Boards and Municipalities (and, in the case of the Kolar Gold Fields area, to the Sanitary Board), which have been constituted local education authorities. Alongside the local education authorities have also been instituted school boards which deal with the day to day administration of primary schools. Each school board is to have its own administrative and inspecting staff, but for the present departmental officers like the district educational officers and the assistant inspectors serve as school board officers and school board assistants respectively in addition to their departmental duties.

The needs in respect of primary education are a large increase in the number of schools, since a considerable part of the State is yet not supplied with schools, a rapid elimination of the single-teacher schools and a rise in the qualifications of the teachers.

Post-primary Education

This is a course of four years and is given in institutions known as Middle Schools. The following statement gives the number of Middle Schools and their strength :

KINDS OF INSTITUTIONS	BOYS		GIRLS	
	NO. OF INSTITUTIONS	PUPILS	NO. OF INSTITUTIONS	PUPILS
Government Schools . . .	262	25,854	21	1,355
Aided Schools	25	3,788	8	783
Unaided Schools . . .	3	257	1	20
Total	290	29,899	30	2,158

Kannada Middle Schools	256
Urdu Middle Schools	29
Tamil Middle Schools	4
European Middle Schools (where English is the medium of instruction)	1
Total	290

No fees are charged either at this stage or at the primary stage, so that the eight years of elementary education are free in the State. The two special features of this stage of education are that English is studied as the first language and that practical instruction is given,

among the subjects of instruction being agriculture, weaving, carpentry, brasswork, leatherwork, rattanwork, tailoring and lacquerwork. There are 95 institutions where practical instruction of the kind is given. In the case of girls, the alternative subjects of practical instruction are domestic economy and needlework.

High School Education

There are 29 High Schools for boys and 5 for girls, and the course is one of three years. The subjects of study are English, a second language, history and geography, elementary science including biology, elementary mathematics and an additional subject. The additional subjects that may be offered are drawing, additional mathematics, a classical language, vocational subjects like weaving, typewriting, electric wiring, commerce, domestic economy and needlework and music. Except as regards the additional subject, the course is the same for all, but the institution of diversified courses to suit different aptitudes is under consideration. At the end of three years the pupils are presented for the public examination by the S.S.L.C. Board, and successful candidates are graded into two groups—those who obtain lower minima and qualify for a pass, and those who obtain the higher minima fixed by the University for matriculation. With the exception of 14, all the high schools are administered by the Department. The number of pupils in the three high school classes was as follows :

1931–2

CLASSES	HIGH SCHOOLS FOR	
	BOYS	GIRLS
IV Form	2,168	155
V Form	1,883	108
VI Form	2,545	120
Total	6,596	383

In this stage of education, instruction is given in English in all subjects, except the second language. It is, however, the policy of the Department to introduce the vernacular as the medium of instruction in all subjects other than English, but as the demand for English is very strong, history and geography are taught, as an experimental measure, in the vernacular in some of the high schools, and it is proposed to use the vernacular gradually in the teaching of the other subjects and in all the schools.

University Education

The University of Mysore was established in 1916 with only two Faculties, Arts and Science, but two more were added subsequently, Engineering and Medicine. The degrees granted are :

B.A. (Bachelor of Arts), Pass and Honours; B.Sc. (Bachelor of Science), Pass and Honours; B.T. (Bachelor of Teaching); B.E. (Bachelor of Engineering); M.B.,B.S. (Bachelor of Medicine and Surgery); M.A. (Master of Arts); and M.Sc. (Master of Science). The University also conducts a course for a Diploma in Medicine) L.M.P. (Licentiate Medical Practitioner).

There are five Colleges preparing candidates for degrees: Maharaja's College (Arts), Central College (Science), Engineering College, Medical College and Maharani's College for Women (Arts). There are also three Intermediate Colleges (one of them for women), which prepare candidates for the Intermediate Examination which is taken at the end of the first two years in the University. The Intermediate course has two divisions, Arts and Science. The course for a Pass B.A. or B.Sc. degree is two years after passing the Intermediate examination, while candidates for Honours have to study for three years. The course for the B.E. degree is four years, and for the M.B.,B.S. five years, after the same examination. Candidates for the B.T. degree have to be graduates in Science or Arts, and the course is of one year.

The subjects of study in the University are English, an Indian vernacular, Sanskrit, Persian, Arabic, history, economics, philosophy, mathematics, physics, chemistry, botany, zoology, geology, experimental psychology, teaching, engineering and medicine. Among the other institutions in the University are the University Library, the Oriental Library and the Department of Archæology.

The Controlling Agencies in the University are the Chancellor, Pro-Chancellor, Vice-Chancellor, the University Council, the Academic Council, the Senate, and other bodies like the Faculties and the Boards of Studies. The Vice-Chancellor is a paid full-time officer, and the University Council is the executive body of the University. Each College is administered by a Principal. The numbers in the University in 1932–3 were as follows:

NO.	CLASS	MEN	WOMEN	TOTAL
1.	Intermediate	1,536	60	1,596
2.	Bachelor of Arts (Pass)	194	21	215
3.	B.A. (Hons.)	91	4	95
4.	B.Sc. (Pass)	221	14	235
5.	B.Sc. (Hons.)	120	5	125
6.	B.T.	53	6	59
7.	M.B.,B.S.	85	7	92
8.	B.E.	178	—	178
9.	L.M.P.	176	20	196
10.	M.A.	26	4	30
11.	M.Sc.	10	3	13

The University expenditure amounts in round figures to Rs. 12,50,000 per annum, towards which Rs. 9,50,000 are contributed by the Government.

Technical and Vocational Education

The institutions for vocational and technical education in the State, apart from the two professional colleges in the University to which reference has already been made, fall into two classes.

(1) The first class of institutions includes 4 agricultural and 16 (9 State and 7 Aided) industrial schools. The agricultural schools provide a course of one year, consisting of theoretical and practical work. Admission is limited to candidates who have completed a six-year course of primary education and passed the examination at the close of it. During 1931–2 there were 42 pupils in the four schools, and the expenditure on these schools amounted to Rs. 16,000 in round numbers. The industrial schools give preference generally to boys from the artisan classes and, with one exception, no general educational qualification is insisted upon before admission. The applicants have to be about 12 years and physically fit. In view of the lack of general education of the pupils, provision is also made for general education in addition to industrial training. The subjects of instruction are carpentry, rattanwork, smithy, lacquerwork, weaving, sandal-wood carving and brasswork. One institution, the Chamarajendra Technical Institute, Mysore, provides also courses in engraving and enamelling, and has further an Arts department in which drawing, painting, modelling and designing are taught. The total number of students under training in these institutions was 1,934 in 1931–2. The total expenditure on industrial schools amounted in 1931–2 to Rs. 1,03,160.

(2) The second class of institutions is meant for students who have completed the High School course. There are four such institutions :

(*a*) The School of Engineering provides a course of three years in civil, mechanical and electrical engineering, in each of which branches there are two grades, higher and lower. During 1931–2 there were 330 pupils in the institution and the expenditure amounted to Rs. 46,000 in round figures.

(*b*) The School of Agriculture provides a course of two years, at the end of which a Diploma is given. The enrolment in 1931–2 was 83 and the expenditure amounted to Rs. 11,800 recurring and 1,000 non-recurring.

(*c*) The Medical School is administered by the University and provides a course of four years. Successful candidates are given the Diploma L.M.P. (Licentiate Medical Practitioner). The enrolment in 1931–2 was 88 and the expenditure amounted to Rs. 23,000 in round figures.

(*d*) The Institute of Commerce and Accountancy. Courses are provided in accountancy, shorthand and typewriting and other commercial subjects. The institution trains candidates for the accountancy examinations conducted by the All India Board under the Government of India. The enrolment school during the year 1931–2 was 190 and the expenditure amounted to Rs. 18,260.

Arrangements have been made for starting at an early date an Institute of Technology in which textile engineering will be taught to start with, and it is hoped to make provision for other branches of technology gradually as funds permit. The Institute will be associated with the Silver Jubilee of the rule of His Highness the Maharaja.

Sanskrit Learning

There are 79 institutions of different grades for the study of Sanskrit, in addition to facilities for the study of the language in the general schools and in the University. There are two Government Colleges in which provision is made for higher training in several branches of Sanskrit learning. There are also two aided Colleges, and 45 schools where training of a lower grade is given. During 1931–2 the number of students was 2,256 and the expenditure on these institutions was Rs. 70,000 in round figures.

Special Schools

There is a Central Institute for Defectives where training is given to the deaf, dumb and blind. In addition to teaching the blind to read according to the Braille system, and the deaf and the dumb to communicate by signs, provision is also made for some form of occupational training. Training in music is provided for such of the blind as show aptitude for it, while rattanwork, weaving and tailoring are provided for others. The institution provides free board and lodging for the pupils, and is supported by Government grants and contributions from local bodies and subscriptions. The number of inmates during 1931–2 was 108 and the expenditure amounted to nearly Rs. 10,000.

Education of Girls

There are two colleges for women in the University, one of which prepares candidates for degrees, while the other prepares them only for the Intermediate Examination. The number of students in these institutions was 81 in 1931–2.

There are 5 High Schools for girls, 30 Middle Schools, and 523 primary schools. There is a Vocational Institute for Women at Mysore where needlework and weaving are taught. The pupils in the needlework classes were presented for the examination held by the City and Guilds of London Institute, and of 29 candidates 26 were successful. There is a liberal scheme of scholarships for the encouragement of study among girls, and the expenditure on institutions for girls (including University colleges for them) is Rs. 6.5 lakhs per annum. The number of students in the different institutions is: University 81, High Schools 383, Middle Schools 2,158, primary schools 31,297.

Education of Mahomedans

There are separate primary and Middle schools for Mahomedans where instruction is given through Urdu, but Mahomedan pupils

study in the same High Schools and Colleges as others, necessary provision being made in these institutions for instruction in Urdu, Arabic and Persian. The number of Urdu primary schools during 1931–2 was 605 for boys and 3 for girls. The number of Mahomedans in the University classes was 165 (153 in arts and science classes, one in the Medical College and 3 in the Engineering College). The number of Mahomedan pupils in the High Schools was 560, of whom 24 were girls. In addition to special scholarships provided for them, all Mahomedan pupils also pay fees at half the usual rates. Special conveyance arrangements are made at Government cost in the case of Mahomedan girls, since they observe purdah.

Education of Special Classes

The State consists of a large population (1,230,000) of communities known as the Depressed Classes, and in the case of a large section of this group, their backwardness is accompanied by untouchability. The State has been endeavouring for several years past to promote education among them. There were, in 1931–2, 600 special schools for these communities, while they are also entitled to admission into all educational institutions in the State. There are five free boarding homes for pupils of this community, while there is a combined school and boarding home at Mysore. There is similarly a boarding home and Middle School for girls of this community. In addition, there are ten aided hostels, and the aid given consists of the rent paid for the building, the expenses of establishment and a *per capita* contribution of three rupees per month towards food charges. No entrance, tuition or examination fees are charged from pupils of these communities.

In 1931–2 there were 221 boys in High School classes, 1,582 boys and 69 girls in Middle School classes, 14,813 boys and 2,640 girls in the primary stage, 337 pupils in special schools and 45 boys in the University classes. The budgeted amount for expenditure on Depressed Class education in 1931–2 was nearly 2 lakhs of rupees.

Training of Teachers

There are at present three grades of training :

1. A vernacular course of three years for persons who are already working in primary schools or are expected to work there. The course consists of the following subjects : Kannada (or Urdu), history and geography, elementary science, mathematics and a special subject such as nature study and agriculture, music, rural sociology and economics, hygiene, domestic science, etc. The professional subjects include the principles of education, methods of teaching and school organisation.

2. Post-secondary training. This course is intended for persons who have completed a High School education and expect to work in Middle Schools. It lasts for a single year, and the subjects of study are professional.

3. Training classes for graduates. As mentioned above, the University provides a course of one year, which prepares candidates for the B.T. degree.

There are at present six institutions of the first class and two of the second. Two of these are institutions for women, and one of them provides courses of the first two grades for women whose mother tongue is Kannada, and the other is intended for Mahomedan ladies and provides a course meant for primary school teachers.

In addition to the above courses, there are special courses for the training of *pandits* and *moulvis* to teach the vernacular and classical languages of the country.

Physical Culture and Allied Activities

Every school, other than the primary schools, levies a small fee for sports, and the collections are spent on games. Drill instructors are attached to all the High Schools and to the large Middle Schools, and, in addition to games, systematic physical training is given in these institutions. A scheme of medical inspection is also in operation in the cities of Mysore and Bangalore and in a large number of other centres. Scouting has been organised in the schools for some years past, and there is a special officer known as Organising Commissioner for Boy Scouts, whose function it is to carry on propaganda and direct the movement. There are 8,973 scouts and 658 scout masters in the State. The Girl Guide movement has been recently started, and, as a preliminary to work in the schools, a considerable number of teachers have been trained as girl guides.

Music

Provision is made for teaching music in all girls' schools, but, except in the High School stage, music does not form one of the subjects that may be offered for the examination. Special examinations have been instituted in music and are of three grades, junior, senior and advanced. Recently the University Senate passed a resolution approving the inclusion of music as one of the optional subjects that may be offered for the degree of Bachelor of Arts.

N. S. SUBBA RAO.

The Colonies

CHAPTER ONE

EDUCATION IN BRITISH MALAYA

(WITH SOME REFERENCE TO THE EDUCATIONAL SYSTEMS OF THE NETHERLANDS EAST INDIES AND INDO-CHINA)

THE educational challenge of British Malaya is to a certain extent the common challenge thrown out by their Far-Eastern possessions to every Western colonising power. Like the Dutch in the Netherlands East Indies and the French in Indo-China, the British in the Malay Peninsula have been faced with the difficulty of devising a system to meet the needs of a heterogeneous population, composed of indigenous and immigrant races differing in language, traditions, customs, beliefs, aims and aptitudes. The problems of Malaya are no doubt on a miniature scale, but they are hardly less complex than those of her larger neighbours.

For the Malay Peninsula is a political mosaic. In area hardly exceeding England and Wales, in population scarcely equalling Scotland, it yet comprises no fewer than twelve settlements and states—the three " Straits Settlements " of Singapore, Penang (with Province Wellesley) and Malacca ; the four " Federated Malay States " of Perak, Selangor, Negri Sembilan and Pahang ; and five independent Unfederated States, Johore, Kedah, Perlis, Kelantan and Trengganu. The direct sphere of the Malayan Education Department is the Straits Settlements and the Federated Malay States ; while it also trains Malay vernacular teachers for, and (in the case of Johore and Kedah) lends European officers to, the Unfederated States, whose policy has developed along more or less parallel lines. Some description of all these political units, and of their main racial groups, is therefore a necessary preliminary to a consideration of the educational problem.

Political and Racial Divisions

The earliest British Settlement in Malaya is Penang, which was ceded to Captain Francis Light in 1786 ; but the most notable historically is Malacca, which, after a chequered history as successively a Malay kingdom, a Portuguese and a Dutch possession, was eventually transferred to Great Britain in 1824 in exchange for British settlements in Sumatra. Singapore—a lasting memorial

to the genius and foresight of Sir Stamford Raffles—emerged from some centuries of obscurity as a fishing village when Raffles occupied it in 1819, in virtue of a treaty with the princes of the neighbouring Malay State of Johore, and rapidly became the most important settlement. Until 1858 the Straits Settlements were under the East India Company. They passed, on the abolition of the Company, to the control of the India Office and ultimately to the Colonial Office, becoming in 1867 a Crown Colony with a Governor assisted by Executive and Legislative Councils.

British influence in the Federated and Unfederated States is of more recent growth. Internal anarchy led the Malay rulers of Perak, Selangor, Negri Sembilan and Pahang at various dates during the latter half of the nineteenth century to seek British residents " whose advice should be asked and acted upon on all questions other than those touching Malay religion and custom " ; and in 1895 the rulers signed a treaty whereby (while they remained independent sovereigns) their four States were constituted a Federation to be administered under the advice of the British Government. The Unfederated Malay States are independent States under the protection of Great Britain, Johore having obtained a British " General Adviser " in 1914 ; while the rights of suzerainty over the other States were transferred from Siam to Great Britain in 1909.

This peninsular patchwork of small states and settlements contains a peculiarly heterogeneous population, the 1931 Census Report enumerating over seventy races. A classification of the main racial groups which make up the total population of 4,385,346 has, however, been made as follows :

	EURO-PEANS	EURA-SIANS	MALAY-SIANS	CHINESE	INDIANS	OTHER RACES	TOTAL
Straits Settlements . .	10,003	11,292	285,316	663,518	132,277	11,609	1,114,015
Federated Malay States .	6,350	4,251	593,731	711,540	379,996	17,228	1,713,096
Total S.S. and F.M.S. .	16,353	15,543	879,047	1,375,058	512,273	28,837	2,827,111
Unfederated Malay States.	1,415	500	1,082,974	334,334	111,736	27,276	1,558,235
Combined total for British Malaya . . .	17,768	16,043	1,962,392[1]	1,709,392	624,009	56,113	4,385,346[1]

[1] *The total includes some* 30,000, *mainly Malays, of the State of Brunei in Borneo.*

These figures reveal that the three main racial groups with which the educational problems of Malaya are concerned are the Malaysian, Chinese and Indian ; the combined totals of Europeans, Eurasians and other races (mainly Siamese, Ceylon peoples and Japanese) amounting only to some 2 per cent. of the population.

Broadly speaking, the Malaysian is the indigenous element, its language Malay, and its chief occupations are agriculture and fishing. Its main constituent is the peninsular Moslem Malay (1,644,173) ; but it comprises also immigrant Malaysian elements from Java, Sumatra and other parts of the Archipelago, and

" the true people of the country," some 30,000 aborigines, chiefly Sakai jungle dwellers, who are gradually changing their characteristic nomadic habits for a more settled life and adopting the Malay language.

The Chinese component—mainly immigrants from the southern maritime provinces of China—is now almost as numerous as the Malaysian, having increased by some 45 per cent. in the last decade. It dominates in all urban areas of the Straits Settlements and Federated Malay States, and has penetrated to all parts of the peninsula, the energy of Chinese miners, agriculturists, fishermen, merchants and craftsmen having played a large part in the development of Malaya. There are many tribes, with a consequent complexity of languages, customs and characteristics, but the five principal communities are Hokkien, Cantonese, Hakka, Tiu Chiu and Hailam.

The Indian element is equally complex. To quote from the 1931 Census Report: " The problem of racial classification of Indians is at least as formidable as in the case of Chinese immigrants." Five-sixths of the immigrant Indian population is, however, Tamil. Tamils, Telegus and Malayalis from southern India form a labour population for estates and the department of Public Works ; while the middle classes become clerks, contractors and merchants ; Punjabis, Bengalis and other northern Indians find employment as police and watchmen ; and there are also a few Gujaratis, Mahrattas, Gurkas and Burmese in various occupations.

The Present Educational Policy

In such circumstances of racial and linguistic diversity, in such a medley of indigenous and immigrant peoples, the following questions inevitably present themselves : Whom shall Government educate, and in what language ? Among the many vernaculars, which shall have preference ? How far shall the selected vernacular be the sole medium of instruction, and at what stage shall the language of the colonising power be introduced ? Is bi-lingual instruction practicable or advisable ? What type of education will best meet local needs ? In the effort to reconcile Western and Eastern cultures, what place shall be given to traditional native educational systems ?

To answer the challenge of these and similar problems there has been gradually evolved an educational policy which, as modified recently to meet the straitened economic circumstances of Malaya, may be defined as follows :

I. *Vernacular Education*

The provision by Government, free for all Malays, and in the Straits Settlements for children of all races who desire it, of an elementary education in the Malay vernacular, with a rural and practical trend adapted to the requirements of Malay *kampong* or village life.

(Education in the vernaculars of the immigrant peoples—Chinese,

Tamil, etc.—is primarily the private concern of these communities, or, in the case of estate labour, their employers, Government giving financial assistance under certain conditions.)

II. *English Education*

(*a*) The provision, at a small cost, of an elementary education in English for all races, either in Government schools or in aided schools of the same educational efficiency.

(*b*) The provision of secondary English education for all races, also inexpensive, but at a somewhat higher rate of fees, the ultimate aim being to make secondary education as far as possible self-supporting.

English education is free to promising Malays, while a liberal proportion of scholarships and free places is available for deserving pupils of all nationalities.

III. *Vocational Education*

The provision of Government institutions for vocational training, through the medium both of Malay and English, of a type suited to the industrial and economic needs of Malaya.

It is the purpose of the present chapter to show how this policy has been evolved and implemented; how far it meets Malayan educational requirements; and, briefly, in what respects it corresponds with or diverges from the solutions to similar problems offered by neighbouring systems.

Traditional Malay Education

The circumstances of Malaya with regard to traditional education, if we omit the traditional cultures of the immigrant peoples, are somewhat less complex than those of her neighbours. Malay traditional education—so far as any system can be said to have survived to the nineteenth century and the period of British influence—centred around the religious Koran schools. There the Malay boy, by laborious and mechanical study of the Arabic alphabet and repetition of Arabic texts and formulæ, ultimately acquired the ability to read the Koran and repeat the principal Mohammedan prayers. Beyond this there was no systematic programme of instruction, and there were no Malay schools. For the rest, the child acquired from his parents the rudiments of his vocational training—agriculture, fishing, hunting and fighting, and there was some study of magic and medicine. But there was no strong traditional system which could be adapted (like the *pagoda* schools in French Cambodia) to the needs of modern education, nor which, on the other hand, like the Annamite traditional system, proved a hindrance to educational progress and required suppression by Government.

The Koran school is still an important factor in the religious life of the Malay community; but, except that it is frequently held in the vernacular school building after ordinary school hours, it stands as a rule apart from the official education system. Moslem religious knowledge, however, forms part of the curriculum at the Sultan Idris Training College for Malay vernacular school teachers, which is referred to below.

Historical Sketch of Educational Development

Prior to the transference of the Straits Settlements to the Colonial Office in 1867 there was no Government policy of education either in the vernacular or in English.

It is true that as early as 1823 Sir Stamford Raffles had founded and endowed with valuable lands an Institution in his new settlement of Singapore and, anticipating the problem of reconciling Eastern and Western cultures, had endeavoured to provide departments, not only for English education, but also for studies in the literature, traditions and cultures of Chinese, Siamese and Malays. Such ideals were, however, much in advance of their time, and with the departure of Raffles his Institution remained a derelict building for many years before developing along the lines of an English school of the type described later. The project is recorded more as a tribute to the vision of its founder than as any definite step in Government educational policy.

English contact with Malaya did, however, result in various early private educational experiments. The needs of Government and growing commercial houses for clerks and interpreters, the public spirit of various communities in the larger towns, and the zeal of missionary enterprise, led during the early nineteenth century to the establishment of trustee, mission and private schools, some of which received a measure of Government subsidy. Such schools were mainly " English schools " (where the medium of instruction was English), although classes in vernacular languages were at various times established, and from Mission presses there emerged Malay translations of the Gospel and simple school textbooks.

There was, however, no common system, and a Select Committee of the Legislative Council in 1870 reported " a great number and variety of schools in the Colony . . . all apparently having a system of their own, unchecked as a rule by Government supervision." From the recommendations of this Committee were evolved the main lines along which Malayan educational policy has subsequently developed. The first steps were taken in 1872, when an Inspector of Schools was appointed in Singapore, and a distinction was made between (*a*) Government schools, managed, staffed and financed entirely by Government, and (*b*) Aided schools, under mission or private management. The further distinction emerged, based on medium of instruction, between English schools and Malay vernacular schools. The title of Inspector of schools, Singapore, was changed in 1901 to Director of Public Instruction for the Straits Settlements, the Director being assisted by a Superintendent of Education in Penang and an Inspector of Schools in Malacca.

Developments in the Federated Malay States proceeded along similar lines. Perak, even prior to federation, had an Inspector of Schools (1890). After federation the post of Federal Inspector of Schools was created in 1897, a post which was eventually (1906)

amalgamated with that of the Director of Public Instruction, Straits Settlements, to form the present post of Director of Education, Straits Settlements and Federated Malay States. At various subsequent dates each of the remaining Federal States has acquired its Inspector of Schools as local administrative head, and the departmental organisation has developed to the stage represented in the diagram on the opposite page.

Present Administration and Organisation

The Director of Education is responsible for the administration of education in the Colony, and advises the various Governments of the Federated Malay States, being an *ex-officio* member both of the Legislative Council of the Straits Settlements and the Federal Council of the Federated Malay States. Since 1910 there has been in the Colony an Education Board of four official and four unofficial members, with the functions of determining and receiving the fees in Government schools, receiving the proceeds of the educational rate, submitting the annual educational estimates, and advising Government upon educational matters.

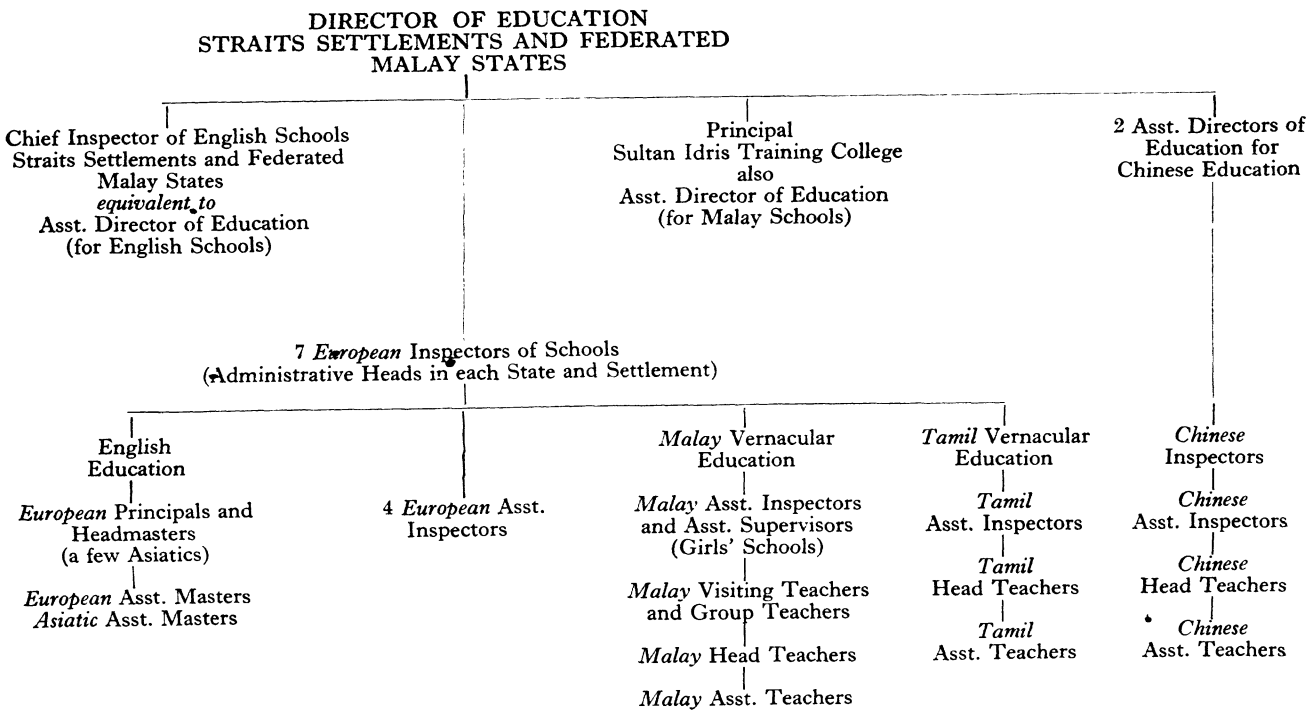
While in each Settlement and Federated State the Inspector of Schools is local administrative head, the growth of English schools and of the different branches of vernacular education has necessitated the appointment of various Assistant Directors of Education or officers with equivalent functions, who are responsible to the Director for their respective branches. Thus the Chief Inspector of English Schools has the functions of an Assistant Director in charge of English Education ; the Principal of Sultan Idris Training College is also an Assistant Director for Malay Education ; while there are two Assistant Directors, civil servants specially trained in Chinese affairs, in charge of Chinese Schools in the Straits Settlements and Federated Malay States respectively. (Some effort has been made in the diagram to indicate the functions of these officers.) Other specialist posts are Trade School Instructors and Art Superintendents ; while three appointments, now vacant or abolished, but which have served useful purposes of development and co-ordination, have been those of European Lady Supervisor of Malay Girls' Schools, European Inspector of Tamil Schools and Chief Superintendent of Physical Education.

Each of the Unfederated States has its independent education department. In Johore and Kedah the Superintendents of Education (lent, as has been mentioned, by the Malayan Education Department) have the powers of a Director in their own sphere.

Educational Finance [1]

Apart from comparatively small sums from private sources, practically the whole cost of education throughout Malaya is met from Government revenues.

[1] The currency unit in Malaya is the Straits dollar, the rate of exchange of which is fixed at *2s. 4d.* For convenience of reference all figures here have been converted into sterling.



(The direct sphere of control of the Department is the Straits Settlements and Federated Malay States.)

In the Straits Settlements an education rate is levied of 2 per cent. on property in municipal and 1 per cent. on property in rural areas; while in the Federated Malay States the rate is 2 per cent. on the annual value and 1*s.* 6*d.* on the unimproved value of property in Sanitary Board Areas. The only other source of education revenue is the small fees charged at English schools, which at present vary from 4*s.* 8*d.* to 9*s.* 4*d.* per mensem. A new scheme of fees is, however, being introduced for new pupils enrolled after January 1st, 1934, under which pupils up to Standard VI inclusive will pay 7*s.* per mensem and pupils from Standard VII upwards 14*s.* or £1 1*s.* per mensem.

Education revenue in 1932 was: Straits Settlements, £162,300; Federated Malay States, £60,100. In the largest of the Unfederated Malay States, Johore, the revenue was £2,720; in Kedah £2,184; and various small sums were collected in the other Unfederated States. Expenditure for the same year was: Straits Settlements, £412,250, being 7*s.* 5*d.* per head of population; Federated Malay States, £386,620, being 4*s.* 6*d.* per head of population. The economic depression has recently necessitated curtailment of educational, as of other, expenditure and the above figures are in the case of the Straits Settlements some £32,000, and in the case of the Federated Malay States some £84,000, less than the 1931 expenditure. In 1931 the proportion of expenditure on education to the total Government expenditure was: Straits Settlements 5·69 per cent. and Federated Malay States 6·48 per cent., similar figures for 1932 being not yet available. Educational expenditure in the larger Unfederated States was: Johore £80,110, Kedah £48,524, Kelantan £4,970 and Trengganu £4,028.

Two items of expenditure call for comment:

Teachers' Salaries

Concerning the salaries of Government teachers in Malaya there is only space here to state briefly that salaries of European officers range from £420 to £1,470 per annum; of Asiatic teachers in English schools from £140 to £560, and of Malay vernacular school teachers from £21 to £224.

Grants-in-aid

These form an important item in the educational Budget, the amounts thus expended in 1932, being approximately:

	Straits Settlements	*Federated Malay States*	*Total*
	£	£	£
Aided English Schools . .	103,850	68,400	172,250
Aided Chinese Schools . .	5,300	9,470	14,770
Aided Tamil Schools . .	1,350	7,150	8,500
Total	110,500	85,020	195,520

Small grants were also made in some of the Unfederated Malay States.

It will be noted that almost 90 per cent. of these grants—representing more than one-fifth of the total educational budget—are grants to aided English schools, a measure of the important part played in the English education of Malaya by various missionary bodies. For the Aided English schools are now practically all mission schools, the main bodies whose educational activities receive Government subsidy being the Roman Catholic Mission of the Christian Brothers, the Methodist Episcopal Mission of America, the Roman Catholic Sisters of the Holy Infant Jesus, the Church of England, the Portuguese Convent and other smaller institutions.

The conditions under which these grants have been paid by Government have undergone many changes during the past sixty years, but the policy falls broadly into two stages :

Prior to 1920 schools were inspected and graded yearly on a basis of educational efficiency, and grants were calculated, with modifications from time to time, on the grade, examination passes and attendance figures for the preceding year. The defects of this system were not merely that Government had only a vague control over organisation and staff, but also that only institutions which had considerable financial resources could progress or even exist pending receipt of grants, which were always retrospective. As a consequence the main trustee schools of Malaya had one by one, owing to financial difficulties, to be taken over by Government, the last (1920) being the Penang Free School, the premier school of the Colony, which had been founded in 1816. The various mission schools also experienced increasing financial troubles.

A Committee of Investigation was therefore appointed in 1919, as a result of whose recommendations the present system of grants-in-aid to English schools was introduced. The details of this system have undergone various minor modifications, and are indeed at present under reconsideration in view of the economic situation; but the main principles are definitely established, whereby Government enables approved schools to " balance their budgets " by paying monthly grants-in-aid equal to the difference between revenue from fees collected by them and approved expenditure. Under " approved expenditure " the main provisions are salary and leave for lay teachers at the same rate as for Government teachers of similar qualifications; salary for missionary teachers at flat rates now being revised; capitation grants to cover contingent expenses; payment by Government of half the costs of education buildings; and Government contributions towards teachers' provident funds.

The comparatively small grants-in-aid to Chinese and Tamil vernacular schools (also under reconsideration) are based on grading, attendance, examination results and compliance with the sanitation and other requirements of the Registration of Schools

Enactment and the provisions of the Education Code, the Aided schools being inspected annually by Government Inspectors.

Educational Legislation: Compulsory Attendance

The Straits Settlements, each of the Federated Malay States, and the Unfederated States of Johore and Kedah have compulsory Educational Enactments, the earliest having been introduced in Negri Sembilan in 1900, and the latest in Perak in 1916. These enactments are alike in requiring the attendance of Malay boys (the only children for whom education is compulsory) who live within reasonable radius of a Government Malay vernacular school —the radius in the Colony being 1½ miles and in the Federation 2 miles. The age of compulsory attendance is from 7 to 14 years, or (in practice) to the passing of the highest vernacular standard. In Malacca the highest age is 12 instead of 14.

The penalty imposed on parents or guardians for non-compliance is a small fine or simple imprisonment in default; but, while in the early days of vernacular education the enforcement of these enactments was necessary to overcome Malay apathy and prejudice against secular education, it is now rarely necessary to invoke them. The pendulum has indeed swung in the other direction: the Malay villagers are now demanding schools, both for boys and girls, more rapidly than Government can supply them, and in many instances (at least prior to the present depression) are providing and equipping their own temporary schools pending Government provision of a permanent building.

How far the various Malayan Governments, particularly the Straits Settlements, Federated Malay States and Unfederated States of Johore, Kedah and Perlis, have progressed towards the ideal of every Malay boy attending a vernacular school, may be seen from the following comparison of the actual and "potential" Malay schoolboy population in 1932. The "potential" figures are of course only approximate and err if anything on the high side; the numbers of Malay boys between 6 and 14 years being roughly calculated from the 1931 Census totals of Malaysian boys between the ages of 5 and 15. The significance of these figures is enhanced when it is remembered that most Malay boys complete the vernacular curriculum much earlier than the age of 14; and that no account is taken here of some thousands of Malay boys at English schools.

There is no compulsory education in English, nor is attendance compulsory for Tamil and Chinese children at their vernacular schools. Under the Labour Code, however, a manager may be required to provide a school for vernacular education on any estate where there are ten or more children of school age of any one race; while by the Registration of Schools Enactment "all places where 15 or more persons are habitually taught" must be registered, and comply with certain regulations as to sanitation and suitability of premises.

	NUMBER OF MALAYSIAN BOYS BETWEEN THE AGES OF 5 AND 15, 1931 CENSUS	ESTIMATED "POTENTIAL" MALAY SCHOOL-BOY POPULATION AGES 6–14	ACTUAL NUMBER OF MALAY BOYS AT VERNACULAR SCHOOLS, 1932
Straits Settlements . .	34,896	28,000	18,948
Federated Malay States .	72,604	58,000	30,689
Total for S.S. and F.M.S.	107,500	86,000	49,637
Johore	29,355	24,000	8,712
Kedah	36,661	29,000	10,436
Perlis	4,942	4,000	1,840
Kelantan . . .	40,173	32,000	3,904
Trengganu . . .	20,257	16,000	2,000

Medium of Instruction: Bi-lingualism

It has been indicated above that Malayan schools are, with the exception of the recently developing vocational schools, designated according to the language of instruction and that, following this definition, Government policy is mainly concerned with "Malay schools" and "English schools." The classification is simplified by the fact that there are no bi-lingual schools—a point of contrast with neighbouring systems, as will be shown later. It should further be recalled here that "English schools" do not mean schools for English or European children. Apart from a few small private schools of the kindergarten type there are no schools for Europeans only, and *separate education for European pupils forms no part of the official system.*

The factors which have determined Government in the choice of Malay and English as the official languages of instruction, and the considerations against bi-lingual education, demand some review before a description of the scope and curricula of the various types of schools is given.

The selection of Malay, from the many vernaculars of the Peninsula, as the language of Government vernacular schools was in a measure predetermined. Besides being the language of the indigenous people, Malay had become, even before the arrival of the British in Malaya, a *lingua franca* for all races. And, while it has to a certain extent been replaced in this function by English in the commercial centres of the Straits Settlements and Federated Malay States, it still, in all but a few large towns, forms the language of inter-communication for various communities, the common meeting-ground of indigenous and immigrant races. For the Straits-born Chinese, indeed, Malay is the mother tongue. Government officers are in the majority of cases required to study Malay; while in the Unfederated Malay States Malay is the official language (in Johore conjointly with English) of Government departments and courts of justice. The Malay vernacular school has therefore inevitably become the basis of the educational system.

Bi-lingualism, as has been said, is not practised in the Malay

schools. To teach English concurrently with the vernacular would require a large and comparatively expensive English-speaking Malay staff which is not at present available. This difficulty will doubtless diminish as the numbers of Malays graduating from English schools increase; but the time is still distant, even if desirable, when an adequate supply of teachers will be available to give primary English instruction in the Malay village schools. Apart from the question of staff, however, and from the commonly expressed criticism that bi-lingual education would produce pupils with an adequate knowledge neither of English nor of the vernacular, there is the by no means unfounded apprehension that the introduction of English into the *kampong* schools would defeat one of the main objects of Government policy—that these schools shall incline the pupil towards, rather than lead him away from, his rural setting. For the Asiatic, in Malaya as elsewhere, has long regarded the acquisition of a Western language as the passport to office and town-life, to lucrative employment either in Government service or in commerce. The recent economic depression, with its consequent shrinkage of clerical and other openings, has somewhat shaken this confidence in the magic properties of a Western education, but the attitude, if modified, still persists.

It is, of course, desirable that Malay children of promise shall be given an opportunity of acquiring an English education after completing their vernacular course; and for this purpose a system of "Special Malay Classes" has been instituted at English schools (somewhat analogous to the "Link Schools" of the Netherlands East Indies referred to later). In these classes, which extend over two years, Malay pupils who have completed their vernacular course before their eleventh birthday and who desire secondary education are given an intensive training in English, at the end of which they enter the ordinary Standard IV or V of the English school. This education is free and, for the accommodation of rural Malays who come to central English schools, various hostels have been established in which free maintenance is provided. In 1932, 1,816 Malay boys and 51 Malay girls throughout Malaya attended these special classes. While not free from disadvantages, and attracting only a small proportion of vernacular school pupils, the system works efficiently where competent teachers with an adequate knowledge of and interest in Malay and English are available. It has been supplemented recently in Singapore and Penang by afternoon classes in English for Malay vernacular school Standard IV boys.

If bi-lingual instruction has proved impracticable and perhaps undesirable in the vernacular schools, it is definitely impossible in the English schools. As stated in a recent report: "Pupils in English schools come from all over the world—from Alaska to the Fiji Islands and from South America and Cuba to Japan. . . . One cannot practise bi-lingualism in an English school whose pupils speak a dozen languages." It is certainly common

to find in the primary classes pupils speaking seven or eight different vernaculars, and few of them with a knowledge of Malay or English. In the circumstances, the direct method of teaching English is almost inevitable and is universally practised.

While bi-lingualism as a policy is thus impossible, pupils at English schools do not wholly neglect their vernacular studies. Malays return to the study of Malay in secondary classes and, together with Chinese and Indians in secondary departments of English schools (who study their vernaculars privately), offer the vernacular as a language in the Cambridge Local Examinations. Moreover, at the Malay College Kuala Kangsar, a college for the training of selected Malays of rank and ability—the future Malay chiefs and administrators—both English and Malay are taught. In some private Chinese vernacular schools, English of a very rudimentary standard is attempted, and a recent Government regulation requires that any registered Chinese vernacular school teacher giving English instruction shall have obtained at least a Cambridge Junior Local Certificate.

Types of Schools : Vernacular Education

(1) *The Malay Vernacular School*

There were in Malaya in 1932 over a thousand Malay vernacular schools, with an enrolment of nearly 100,000. The following table summarises the position :

	NUMBER OF SCHOOLS		NUMBER OF PUPILS	
	BOYS	GIRLS	BOYS	GIRLS
Straits Settlements .	176	40	18,948	4,709
Federated Malay States .	452	87	30,689	10,584
Total S.S. and F.M.S.	628	127	49,637	15,293
Johore . . .	101	14	8,712	916
Kedah . . .	83	5	10,436	446
Perlis	20	4	1,840	247
Kelantan . . .	65	—	3,904	235
Trengganu . . .	20	—	2,000	99
Total . . .	917	150	76,529	17,236

Included in these figures are four schools for Siamese and one for Sakai aborigines in the State of Perak, all with Malay as medium of instruction. In the Malay vernacular schools of Singapore a large percentage of the pupils are Javanese, Boyanese and Arabs.

It should be noted, too, that the total of 17,236 girls include 7,326 girls attending boys' schools ; for, while there is no definite policy of co-education, the growing demand of the Malays for female education has led to the yearly increasing attendance of girls at the boys' schools where no separate girls' school is available. While

the disparity between male and female totals is great, it is to be remembered that attendance is compulsory only for boys. An attendance of over 17,000 girls must be considered as notable progress towards the removal of Malayan Moslem prejudice against secular female education.

The aim of these schools has already been indicated. The indoor hours are generally from 8 a.m. to 12 noon daily except Friday (the Moslem Sunday), while physical drill and practical gardening take place in the mornings between 7 or 7.30 and 8 a.m. The curriculum extends usually over five years, although some schools have a six- and others as yet only a four-year course.

The subjects of the curriculum are reading and writing (both in Arabic and Roman script), composition, arithmetic, history, geography, hygiene, drawing, physical training, gardening and handicrafts ; while girls are given special instruction in needlework and other handwork, cookery, domestic economy and hygiene.

The growing importance of practical work in these schools is evidenced by the variety of handicrafts practised by the pupils in higher classes. The main craft is basketry work of a type imported in 1916 from the Philippines, which in many centres reaches a high standard and supplies Government offices and a growing public demand ; but the following are also taught in various centres : carpentry, net-making, wood-carving, pottery, book-binding, weaving, chick-making and hair-cutting. Several schools have their own experimental rice-plots, and a few maintain poultry farms. At girls' schools special attention is given to lace-making, silk and other weaving and embroidery.

The great majority of Malay schools have gardens, and the co-operation of the Agricultural Department in inspecting and advising has been secured with a view to teaching the pupils something of rural science. A recent important development has been the encouragement of " home gardens " where the pupils put to practical use the gardening instruction received at school, and there are now many thousands of such gardens maintained by boys at their homes and inspected by head or visiting teachers.

At physical training and games Malays are enthusiastic pupils : most schools have playing-fields, and inter-school drill and games competitions are popular annual events in each State.

The Malay school staff in the Straits Settlements and Federated Malay States numbered 2,440 in 1932, of whom 368 were women ; while there were over 1,000 teachers in the Unfederated States, of whom 411 were employed in Johore, 464 in Kedah and 122 in Kelantan. All are Malays. The Inspectors of Schools are assisted by Malay Assistant Inspectors, Visiting and Group Teachers, and Women Supervisors.

Sultan Idris Training College

The training of male Malay teachers is carried out at the Sultan Idris Training College, which has been described as " the distribut-

ing centre of knowledge in the Peninsula for those Malays whose education is confined to the vernacular." This residential college, opened at Tanjong Malim in 1922, accommodates some 400 students—who receive board and education free—from all States and Settlements. The actual numbers in 1932 were 381. Students are selected by examination after passing through their vernacular school and being given some practical experience as pupil teachers, and enter college about the age of 17.

The course is three years in length, all instruction being in Malay; and the curriculum includes the Malay language and literature, history, geography, arithmetic, simple geometry, hygiene, general knowledge, Moslem religious knowledge, basketry, physical training, rural science and the theory and practice of teaching. Attached to the College is a vernacular school, under a European Master of Method, which is utilised as a practising school for teaching and criticism lessons.

In the rural science course special emphasis is given to practical work on the soil, and the students acquire, besides acquaintance with the growth of various crops, some knowledge of plant physiology and anatomy, of methods of combating plant and animal pests, and of the economic aspects of agriculture. In this latter connection it is to be remarked that the Malay, who obtains the ordinary requirements of life with ease from a generous soil and climate, has hitherto been a somewhat unprofitable field for economic propaganda; and the aim of this side of the college curriculum is to assist the rural population to become sound economic agriculturists.

Among other college activities that may be enumerated as showing the width of the cultural effort made at this " power-house " of Malay education are : debating and dramatic societies, an orchestra, cinema, gymnasium and swimming pool; while half the students become Scouts and the other half volunteers. One-year post-graduate courses in arts and crafts are given to selected students. From the College over 100 trained teachers go out annually " to influence the physical, mental, moral and economic welfare of the coming generation."

One of the most valuable adjuncts to the College is the *Translation Bureau*, which, on a small scale, fulfils similar functions to those of the *Bureau of Popular Literature* in the Netherlands East Indies. Apart from the preparation of vernacular school textbooks, whose sales now amount to many thousands annually, and which are provided free to Malay vernacular schools, the Bureau has of recent years produced the *Malay Home Library Series*, translations of popular Western tales, which are distributed free to village schools throughout the Peninsula as the nucleus of village libraries. The tales so translated to date include *Man-Eaters of Tsavo* (abridged); *Selection from European Fairy Tales; Four Tragedies from Lamb's Tales; Gulliver's Travels; Reynard the Fox; Adventures of Sherlock Holmes; Treasure Island; Four Comedies from*

Lamb's Tales; Cinderella; Aladdin and the Wonderful Lamp; Robin Hood; Round the World in 80 *Days; Coral Island* (abridged); *Puss in Boots and Other Stories;* and various others are in course of preparation.

No systematic training of Malay women teachers has as yet been established, although various courses have been held in different centres under a European Lady Supervisor, at which special attention has been given to domestic science, economy and hygiene. The question of a training college for Malay women teachers is receiving the close consideration of Government, and it is probable that one will be opened in Malacca in the near future.

(2) *Chinese Vernacular Schools*

The Chinese in Malaya have shared in the educational enthusiasm of modern China, and have developed their own system of vernacular education with a comparatively small measure of Government support. Actually there are only two Government Chinese schools (both in the Federal capital, Kuala Lumpur), while less than one-quarter of the total schools are Aided. The 1932 figures for the Straits Settlements and Federated Malay States are 669 registered schools, with 41,858 pupils, divided as follows:

	GOVERNMENT AND AIDED		PRIVATE	
	SCHOOLS	PUPILS	SCHOOLS	PUPILS
Straits Settlements .	37	5,487	288	16,541
Federated Malay States .	111	11,195	233	8,635
Total . . .	148	16,682	521	25,176

In addition, there were in Johore 118 private schools with 4,692 pupils, and some 50 small Aided or private schools in the other Unfederated States—the majority in Kedah—with an estimated enrolment of 2,000 pupils.

Most of the above schools are "mixed," about 12,000 of the pupils being girls.

The large majority of the schools are maintained by the Chinese themselves, sometimes through individual generosity, usually by funds raised among communities of people from the same district in China; while there are also a number of mission schools. A small fee is charged in private schools. All but a few are of a primary type, the course lasting normally six years and the ordinary school subjects being taught. There are, however, several schools which are secondary in nature or which have secondary classes.

While in some of the smaller private schools the medium of instruction is the dialect of the community—Cantonese, Hokkein, Hakka, etc., as the case may be—the majority of schools have during

the past decade developed Kuo Yue or Colloquial Mandarin as the language of instruction. This supersession of the various vernaculars by Colloquial Mandarin is partly a result of " semi-official mandates " from China, and partly due to the growing spirit of Chinese nationalism. It has already been mentioned that certain schools give English instruction ; but as yet usually in an inefficient way.

A few teachers for Chinese vernacular schools in the Federated Malay States are trained at small Government training classes at Kuala Lumpur, while some Chinese schools in the Straits Settlements have Normal Classes. Beyond this there is no systematic training of Chinese teachers.

(3) *Tamil Vernacular Schools*

The majority of Tamil Vernacular Schools are Aided schools under private management, having mainly been established to meet the needs of the rubber estate population and the provisions of the Labour Code already mentioned. A few schools are run by missionary bodies, while in the Straits Settlements there is one, and in the Federated Malay States there are fourteen, schools maintained by Government. The following are the 1932 figures of the 360 registered schools in the Straits Settlements and Federated Malay States; the enrolment at private unaided schools being " estimated."

	GOVERNMENT AND AIDED		PRIVATE UNAIDED	
	SCHOOLS	PUPILS	SCHOOLS	PUPILS
Straits Settlements .	33	1,657	12	300
Federated Malay States .	230	8,939	85	2,400
Total . . .	263	10,596	97	2,700

Complete figures for the various Unfederated States are not available ; but there are in all some 60 schools, of which 46 are Aided schools in Johore with an enrolment of 1,092 pupils. The total enrolment of Tamil vernacular schools in the Unfederated Malay States probably does not exceed 1,500.

All schools are " mixed," about 30 per cent. of the pupils being girls. Education is free in Government and Aided schools, while a small fee is charged in some of the private schools. All are primary schools, the ages of pupils ranging from 5 or 6 to 14 years. The full course lasts six years, the ordinary school subjects being taught, and the medium of instruction being Tamil, or in a few cases Telègu. There is, as has been said, no instruction in English.

Enrolment has fallen somewhat of recent years owing to the economic depression. The efficiency of Tamil schools suffers, too, from the unsettled nature of the Tamil estate population, unsatis-

factory teachers (there are no teachers' training courses), frequent changes of staff—and, in many cases, shortage of funds.

Types of Schools : English Schools

It has become customary to consider vernacular education as the primary system, and English schools as the system of secondary education in Malaya. This classification is accurate only in so far as, with a few exceptions, the English schools are the only ones that progress to a secondary type of education. Actually there are three types of English schools :

(i) Primary or elementary schools, which act as feeder schools for one main secondary school in each of the large urban areas ;

(ii) Purely secondary schools, which recruit their pupils from schools of type (i) ;

(iii) Combined schools which have both primary and secondary departments.

Originally every English school was of the third type—and the majority still are. But the growing demand for English education in the larger commercial centres, complicated by the problem of wastage in higher classes, has during the present century led Government to adopt the " feeder system," which, by concentrating the product of the primary schools, effects economy in staff and buildings. The Aided mission schools, however, as a rule maintain the " combined school " method, preferring on grounds mainly religious to retain the pupil from infancy to adolescence. Small Government English schools in rural districts are of necessity of the " combined " type, as are also all girls' schools.

It is estimated that nearly 60,000 children in British Malaya received instruction in some 250 English schools in 1932. The figures for the schools of the Straits Settlements and Federated Malay States, which absorb over 53,000 of this school population, are tabulated below. (The Unfederated States account for a few thousand pupils, mainly in Johore, where the enrolment at English schools was 2,182, and Kedah, where it approached 1,000.)

Private schools are usually small schools of lower educational efficiency, which cater for over-age and backward pupils. The following analysis and description refer only to Government and Aided schools.

It will be noted from the statistics that, while male English education is shared more or less equally by Government and Aided (mission) schools, the English education of girls is still very largely the care of the missionary bodies, there being only two Government girls' schools, one in Singapore and the other in Penang. Some 500 girls are pupils of the lower classes of boys' schools, where no accessible girls' school exists ; but, as with vernacular schools, there is no definite policy of co-education.

Some indication of wastage of school population at English schools is given by the figures of pupils in the various departments. The 43,731 pupils in the Government and Aided schools of the

STRAITS SETTLEMENTS AND FEDERATED MALAY STATES

(1) *Government Schools*

	SCHOOLS		PUPILS	
	BOYS	GIRLS	BOYS	GIRLS
Straits Settlements	21	2	9,159	994
Federated Malay States	24	—	7,159	—
Total	45	2	16,318	994

(2) *Aided Schools*

	SCHOOLS		PUPILS	
	BOYS	GIRLS	BOYS	GIRLS
Straits Settlements	17	13	9,659	6,442
Federated Malay States	12	13	5,788	4,530
Total	29	26	16,447	10,972

(3) *Private Schools*

	SCHOOLS	PUPILS
Straits Settlements	68 (mixed)	7,000 (estimated)
Federated Malay States	55 (mixed)	3,000 (estimated)
Total	123 (mixed)	10,000 (estimated)

Straits Settlements and Federated Malay States were in 1932 distributed as follows:[1] primary classes (up to and including Standard IV), 30,445; higher primary (Standards V, VI and VII), 9,112; secondary primary ("Cambridge" classes, etc.), 4,174. The ratio as between these departments is therefore roughly 7 : 2 : 1.

The heterogeneous nature of the English school population has already been alluded to; but it is interesting here to summarise the above enrolment by sex and nationality:

NATIONALITY	BOYS	GIRLS	TOTAL
Europeans and Eurasians	2,171	2,066	4,237
Malays	4,432	371	4,803
Chinese	19,088	7,509	26,597
Indians	5,385	1,810	7,195
Others	455	444	899
			43,731

[1] While the above distribution is based on 1932 returns, the dividing line between primary and secondary education is now considered as between Standard VI and Standard VII.

Particularly notable in this analysis are the preponderance of Chinese pupils and the small proportion of Malay girls attending English schools. The Malay demand is tending rather towards domestic and handicraft training for girls than towards secondary or English education.

The usual English school hours are from 8 a.m. to 1 p.m., although some schools have morning and afternoon sessions. The Education Code stipulates that schools shall be open for a minimum of 190 days. Pupils enter the primary classes at the age of 6 or 7, and with normal progress reach the Cambridge School Certificate class about the age of 17 or 18.

The curriculum is comprehensive and includes English, arithmetic, history, geography, handwork, art, drawing, music, hygiene and physical training; while mathematics, science, Malay, shorthand and book-keeping are taught in the more advanced classes, and religious instruction is given in the schools of the missions. In girls' schools needlework, cookery and domestic science are taught. Among the many forms of handwork may be enumerated paper-cutting and folding, decorative lettering, paper, cardboard and clay modelling, pattern and design, mat-weaving, raffia work, book-binding, stencilling, basketry, carpentry, lamp-shade making and picture-framing.

Several of the schools have a commercial department, and the London Chamber of Commerce examinations have been taken since 1916. The Government Commercial Day School in Penang has developed from the commercial department of the Penang Free School. There are fully equipped science departments in a few large secondary schools, and pupils now offer physics and chemistry at the Cambridge Local Examinations.

Examinations

Since 1891 secondary education in Malaya has been associated with the Cambridge Local Examinations, and the suitability for Malaya of these, and of a school curriculum framed to culminate in a Cambridge Certificate, has frequently been debated. In 1902 a Commission of Enquiry recorded that " many favoured dropping these examinations, which led to the cramming of a number of useless subjects by boys who should be studying to fit themselves for a Malayan career." The Commission, however, considered " that they had led to a real improvement in English education, and that no local certificate would have the same value "—an estimate which not inaccurately reflects present-day opinion. Certain modifications have been made in the Cambridge Examination Syllabus from time to time to meet local requirements. Special Malayan Certificates have been introduced and framed to encourage the study of English as an equivalent to the compulsory foreign language. Malay, Chinese and Indian papers have also been included and are taken by many candidates of these nationalities. Over 3,600 candidates from Government and

Aided schools in Malaya took the Junior or School Certificate Cambridge Local Examination in 1932, and approximately 60 per cent. of passes were obtained.

A few pupils take the Matriculation examinations of London and of Hong Kong Universities.

Among the English school activities should also be mentioned literary and debating societies, libraries, orchestras, a few cinematographs and gramophones with linguaphone records. The house system is common in the majority of schools; school games and athletic sports are everywhere popular; the Scout movement has spread to practically all schools, while several of the larger schools have Cadet Corps. Medical and dental inspections are regularly carried out in all English schools (and as far as possible also in all Government vernacular schools).

Staff

There was a staff of 1,700 teachers in the Government and Aided English schools of the Straits Settlements and Federated Malay States in 1932, of whom 276 were "European" (the term including Americans) and the remainder local Asiatic masters. The figures include student teachers.

European masters in Government schools are ordinarily honours graduates of a British university; European secondary mistresses are similarly qualified, while European primary mistresses hold the Higher Froebel Certificate or its equivalent. In mission schools European or American missionary teachers possess either the qualifications required by their religious orders or British or American university qualifications.

A special Training Course has of recent years been instituted at the London Day Training College (now the Institute of Education of the University of London) for selected candidates for the Malayan Educational Service; but recruitment has been suspended during the recent depression.

Local Asiatic masters and mistresses are trained in Normal Classes, "student teachers" for these classes being selected from pupils who have passed the Cambridge School Certificate examination with credit in certain selected subjects. The Normal Course lasts three years, and includes the following subjects: English language and literature, theory and practice of teaching, hygiene, physical education and art. Two hundred and ninety-five students were examined in the various stages of the Normal Course in 1932. Asiatic teachers for secondary classes are also trained at Raffles College, as mentioned below.

Types of Schools: Vocational Education

The problem of vocational education, which received but spasmodic consideration in pre-war days, has assumed growing

importance within the past decade. In particular, during the present times of economic stress in Malaya, the cultural claims of a general education have been challenged by the need for more specialised instruction that shall fit the pupil to earn his own livelihood at some particular trade or industry. This conflict is an inevitable sequel to the growing realisation, already mentioned, that a general English education is no longer a passport to lucrative appointments. And though the long-cherished—and it must be admitted long-justified—belief in the magic properties of the English school dies hard, and the prejudice against " manual " employment is correspondingly difficult to dispel, the process is being assisted by the increasing difficulty experienced by graduates of English schools in obtaining employment.

While adhering as far as practicable to the principle " that all special training must be based on a solid foundation of general education "—an ideal which has its limitations in the present stage of Malayan progress—the Education Department is fully alive to the need for developing suitable types of vocational schools. A recent Annual Report states that " one of the gravest problems to-day is to devise for the coming generation types of instruction fitting the young of Malaya for such careers as the country offers. There can be no doubt that the bulk of the inhabitants must turn to agriculture and other industries, and that the Education Department will have to equip them for those paths of life."

Facilities for vocational instruction are therefore steadily being increased. Mention has already been made of the practical nature of much of the instruction in vernacular, and to a certain extent in English, schools. In addition, the scope and functions of the following special institutions may be briefly summarised :

Carpentry Trade Schools

These two schools, with a total enrolment in 1932 of 105 pupils, are situated at Bagan Serai and Rembau in the Federated Malay States, and are designed to train Malay boys in the trade of village carpenter, which has hitherto been left almost entirely to the ubiquitous Chinese craftsman. Pupils are admitted on passing out of their vernacular school, no knowledge of English being required for admission, although enough English is taught during the course to enable technical terms to be understood. The course extends over three years and tuition is free. The schools are well equipped with the latest types of tools and labour-saving devices, and practical carpentry forms the major portion of the curriculum.

Mention should be made here also of the Trade School opened in Johore in 1932, where three-year courses in carpentry and tailoring are being given to some fifty pupils from Malay Schools and the elementary departments of English schools. A small Trade School has also recently been opened in Kedah.

Trade Schools for Mechanics

There are four such schools, two in the Straits Settlements, and two in the Federated Malay States, with a total enrolment in 1932 of 315 pupils. The courses extend over three years and train boys to be motor mechanics, fitters, plumbers and blacksmiths, and it is intended to develop other trades according to local needs. In the Kuala Lumpur School a special course in oil engines has recently been added, while in Singapore some pupils have been trained in oxyacetylene welding.

The regulations for admission vary slightly in the different centres, but in general candidates must be over 15 years of age; if Malays, they must have passed at least the highest vernacular school standard; otherwise a Standard V or Standard VI qualification from an English school is usually required. It is, however, a significant commentary on the changing attitude to industrial work that applications are now being received even from pupils who hold Cambridge Local certificates.

In Penang a fee of 7*s*. per mensem is charged, except for Malays; elsewhere tuition is free, while in the Federated Malay States, where pupils are frequently recruited from distant villages, a subsistence allowance is made.

The schools have European mechanical engineers as part-time principals, European resident mechanical instructors and trained Asiatic assistants. They are equipped with up-to-date machine, fitting and repair shops, as well as drawing and lecture rooms.

Technical School, Kuala Lumpur

The Technical School was taken over by the Education Department from the Public Works Department in 1925. It at present trains apprentices to the technical departments of the various Malayan Governments, but will ultimately, it is hoped, train also technical subordinates for mines, estates and private firms. Financial difficulties have postponed the projected construction of new buildings, but in the existing premises there have been equipped an electrical laboratory and the nucleus of other laboratories. The number of students in 1932 was 141, of various nationalities, including 35 Malays, the departments represented being the Public Works, Electrical, Railway and Survey Departments. There is a school hostel for sixty students. The policy of the school is directed by an Advisory Committee under the chairmanship of the Director of Education; and the medium of instruction is English.

Other facilities for technical education are afforded in the Government Evening Classes in the large centres of Singapore, Penang and Kuala Lumpur, where such subjects as building construction, reinforced concrete construction, electrical and locomotive engineering, machine drawing and surveying are taught. In Singapore Nautical Evening Classes for Malays are held.

School of Agriculture, Serdang

Opened in 1931 under the control of the Agriculture Department, the Malayan School of Agriculture has accommodation for eighty boarders, but owing to the financial depression and the suspension of Government recruitment of agricultural subordinates in 1932, its present enrolment is only thirty, including both Government scholars and private students.

The curriculum includes two separate courses of instruction :

(*a*) A three-year course (now for reasons of economy in process of reduction to two years) for agricultural " students," conducted in English, and giving a sound general training in scientific agriculture, combined with practical work in the field. A " student " must hold at least a Cambridge School Certificate.

(*b*) A one-year elementary agricultural course, conducted in Malay (with instruction in English as required), for agricultural " pupils " who must have passed the highest vernacular school standard.

With the return of economic prosperity it is confidently expected that local appreciation of the advantages of scientific agriculture will lead to a large demand for agricultural instruction. Agricultural propaganda is carried out by means of a rural lecture caravan, whose programme includes a film depicting the activities of students. In addition, a special agricultural course for *penghulus* (local headmen) was held in 1932 and was attended by sixteen of these officers.

Types of Schools : Higher Education

The nucleus of a future " University of Singapore " exists in two Colleges for higher education—the King Edward VII College of Medicine and Raffles College. While neither of these is under the control of the Education Department, they demand reference in any assessment of Malaya's educational effort.

King Edward VII College of Medicine

In response to the petitions of Chinese and other communities, the King Edward VII College of Medicine was founded in 1905 to train Assistant Surgeons for Government and local practitioners in racial sympathy with the peoples of Malaya. Its management is vested in a Council, with the Director of Medical and Health Services as *ex-officio* President.

The original course was planned for five years, but has since been extended to six, and since 1916 the Diploma has been recognised by the British General Medical Council as a complete registrable qualification entitling licentiates to practise in any part of the British Empire. There are chairs in Physiology, Anatomy, Medicine, Clinical Medicine, Surgery, Clinical Surgery, Midwifery and Gynæcology, Bacteriology and Biology. In addition there

was created in 1929 a chair of Dental Surgery whose diploma enables the holder to practise in Malaya.

There are two hostels, and laboratories and lecture rooms for 250 students, with accommodation also for post-graduate research, a library and playing-fields. Admission is open to candidates of all nationalities who have passed the matriculation examination of a British university or its equivalent, and the total tuition, equipment and maintenance cost for the whole six-year course amounts to about £500.

Raffles College

It was a fitting tribute not only to the work but also to the educational ideals of Sir Stamford Raffles that, on the occasion of the centenary celebration of the founding of his settlement, Singapore, Malayan opinion decided that the most fitting memorial should be a college for the advancement of higher education. As a consequence, Raffles College was founded by public and Government subscriptions and opened in 1928 with the functions of training local secondary school teachers and providing facilities for higher technical and scientific education of a university type.

There are now professors in English, History, Mathematics, Chemistry, Physics and Education (the last-named being also Reader in Geography), and various lecturers; and, when funds permit, the establishment is contemplated of an engineering faculty and of facilities for Oriental studies. It has recently been decided that in future students will be prepared either for the Raffles College Diploma or for a London University Degree.

Candidates for admission may be of either sex and must hold the Cambridge School Certificate or its equivalent. There were over 100 students in 1932, including 48 Government scholars in training as secondary teachers. Besides well-equipped lecture rooms, science laboratories and halls of residence, there are large playing-fields.

Queen's Scholarships

To enable the élite of Malayan English schools to proceed to higher studies in England there are awarded annually four Queen's Scholarships (two in the Straits Settlements and two in the Federated Malay States), each of the maximum yearly value of £500, tenable usually for four years. The examining body is appointed by the Cambridge delegacy, and it is a condition that no scholarship shall be awarded to any candidate who in the opinion of the examiners is not fit to study for an honours degree at Oxford or Cambridge University. The Straits Settlements scholarships are "open"; while in the Federated Malay States one is "open" and the other confined to Malays.

Apart from these scholarship holders, some hundreds of ex-pupils of Malayan schools continue their higher education at various universities in Great Britain, America and China.

Neighbouring Colonial Educational Systems

The educational systems of neighbouring colonies have not been without their interaction on Malaya and on one another. The Malayan vernacular school system was, for example, largely remodelled as a result of an investigation of vernacular and industrial education in Java and the Philippines in 1916 ; a Dutch commission to the Philippines some years ago proved " of great value for education in the Netherlands East Indies " ; while Dr. Thalamas, on the occasion of the recent French Colonial Exhibition, referring to the educational " renaissance " in French Indo-China, claims that " Siam and the Dutch East Indies have paid tribute (to Indo-China) by drawing the inspiration for their school reforms from her." Some reference to neighbouring educational policy is therefore desirable here ; but there is space only for a few brief comparisons between the Malayan, Dutch and French systems.

The Netherlands East Indies and Indo-China have, with numbers many times multiplied, similar problems of racial and linguistic complexity to those of Malaya. The fifty millions of indigenous peoples in the Dutch colonies, while largely Javanese, include also populous communities of Sundanese, Madurese, Malaysians and other races, each with its vernacular ; and there are a million Eastern immigrants, mainly Chinese, and some 200,000 " Europeans " (the term including Eurasians). The Indo-Chinese Union (21,000,000) comprises—with the consequent vernacular diversity—fifteen million Annamites, two and a half million Cambodians, a million Laotians, large communities of aborigines, approximately a million Eastern immigrants, of whom about one-half are Chinese, and some forty thousand French Colonials. In contrast to Malaya it will be noted (i) that the proportion of immigrant peoples is small ; and (ii) the numbers of indigenous vernaculars are many.

Vernacular education has to be modified accordingly, and the problem of a vernacular *lingua franca* is not, as in Malaya, easy of solution.

Both Dutch and French systems include, as does the Malayan, education for indigenous peoples in the vernacular and in a Western medium. Both have in addition, however, a system of schools primarily for European pupils, modelled on the school systems of Holland and France respectively, for the convenience of the Dutch and French colonist. With this latter system—which has no counterpart in Malaya, and which in any case absorbs only a small fraction of the school population—the present chapter is not concerned. The following comparisons confine themselves mainly to the education of indigenous peoples.

Type and Scope of Vernacular Instruction

For the great majority of the school population, both in the Netherlands East Indies and in Indo-China, education is of a rudimentary type comprised in the three-year curriculum of the village school. Thus in the *desa* or village schools of the Nether-

lands East Indies in 1930–1 there were almost a million and a quarter pupils out of a total school population of some 1,837,000; while in the "Schools for the Masses" of Indo-China there were in 1930 some 338,000 out of a total of 390,000. Such schools are usually mixed, co-education being common both in the Dutch and French colonies. The medium of instruction is generally the vernacular of the community. In Indo-China, however, where there is a multiplicity of vernaculars in any school the medium is French; while in the higher types of vernacular schools in the Netherlands East Indies (mentioned below) efforts are being made to develop a form of Malaysian, in addition to the local vernacular, as a *lingua franca*.

Bearing in mind the five- or six-year curriculum now common in practically all Malayan vernacular schools, it is of interest to note the considerations which have determined a three-year curriculum in the rural schools now in question. The vaster districts and population and the greater diversity of stages of social development in the Dutch and French colonies have to be remembered. In general it is held that a three-year curriculum "satisfies the intellectual wants of primitive rural peoples." So far as Indo-China is concerned it is felt that "the vast majority of the children cannot really devote more than three years to school," and the statement is supported by "wastage" figures which give the ratio of 4 : 2 : 1 for the numbers of pupils in the successive years. In this connection the terms of the Decree of 1927 instituting compulsory attendance in Cochin-China (the only instance besides Malaya of compulsory education in the colonies under consideration) are of some significance, education being enforced "for three years between the ages of 8 and 13."

There are in Indo-China many types of these "Schools for the Masses." Apart from the official "elementary" schools, and the first three years of "full-programme schools," there have of recent years been developed, in a wide literary campaign, what have been termed "Formations of Scholastic Penetration":—"Schools for the Minorities," "Preparatory" Schools in Annam, "Communal schools" in Tonkin, and other types. Of particular interest are the *pagoda* schools in Cambodia, which represent an adaptation to secular educational requirements of a system of traditional religious schools. In these schools the *bonzes* continue to give religious and ethical instruction, but combine it with part-time instruction in ordinary primary school subjects, this moulding of Eastern and Western, or religious and secular, educational ideals forming an interesting and incidentally economical experiment. In Annam, as was mentioned early in this chapter, the old traditional ethical education, with its limited application and scope, was found incapable of adaptation and has given way to the new system.

In the Netherlands East Indies, while the rural schools, with their three-year curriculum, have the function of "combating illiteracy," the standard type of official vernacular school in each district is the

" School of the Second Class," to which the *desa* school is often linked by continuation classes. These Second Class schools have a five-year curriculum in many ways analogous to the Malayan vernacular schools. They were attended (including continuation classes) by nearly 440,000 pupils of various indigenous races in 1930–1.

Bi-lingual Instruction

One of the most notable points of contrast between the Malayan and the Dutch and French systems is in the matter of bi-lingualism.

In the Netherlands East Indies bi-lingual instruction is associated mainly with the " Dutch-Vernacular " schools—primary schools with a seven-year curriculum where pupils of indigenous races desiring education of a Western type receive instruction both in their vernacular and in Dutch as a preparation for secondary or professional training. Until recently Dutch and a vernacular language were taught concurrently from the earliest standards (pupils entering school at the age of 6 or 7 years); but the effectiveness of this bi-lingual instruction has for some time been debated by educationists, and recent changes have been made.

In 1925 it was stated: " This type of school is causing serious concern because the native children begin Dutch before they are able to command their own vernacular to any extent. Attempts are being made to construct a course of study that will meet these difficulties without lowering the quality of the instruction in Dutch." (*Columbia University Year Book*, 1925.)

I am indebted to Dr. B. Schrieke, Director of Public Instruction, Netherlands East Indies, for the following particulars of modifications in the system of instruction in Dutch-Vernacular schools introduced in the 1932–3 course. In the first and second years the native children now receive instruction in their vernacular language; in the third year the instruction is partly in Dutch and partly in the vernacular; in the remaining four years the medium of instruction is Dutch, while the vernacular forms a subject in the curriculum. The pupils thus now receive the most elementary instruction (reading, writing and reckoning) in their own language; and pedagogically this is considered to be an improvement.

In 1931–2 over 60,000 pupils attended these Dutch-Vernacular schools. The Dutch language is also taught as a subject in some of the above-mentioned native Second Class schools; and in 1932 some Dutch-Vernacular schools were changed into Second Class schools with Dutch in the curriculum in districts where the population desires some knowledge of Dutch, but a less extensive knowledge than that required in the Dutch-Vernacular schools proper.

To enable promising children from the purely vernacular schools to obtain a Dutch education, the Dutch-Vernacular school system is supplemented by " Link " schools, which have, as stated above, functions analogous to the " Special Classes " at Malayan English schools; and in which intensive training is given in Dutch, the

pupils, on completion of a five-year course, being drafted into the ordinary secondary System.

In Indo-China the bi-lingual experiment is made in many of the " Schools for the Masses," where French is an optional subject in the three-year curriculum. The purpose is to give every child of ability the opportunity, if he proves capable of it, of proceeding beyond a mere rudimentary education to higher instruction which can only be obtained through the medium of French. The danger, which was noted in discussing the Malayan aspect of this question, of creating an " uprooted class " whose access to Western education shall lead them away from their traditional life has not been overlooked, and is met by a strict process of selection by competitive examination, whereby only a small proportion of pupils proceed beyond the " Village School " stage—the actual proportion being about one-eighth.

Western Education and Eastern Culture

The bi-lingual elementary schools of the Netherlands East Indies, followed by *mulo* or higher elementary schools and by general secondary schools, give a complete school system, with Dutch as the medium, for Eastern pupils, the numbers of native pupils above the elementary stage being some 13,000. In Indo-China there is, superimposed on the " Schools for the Masses," a " Franco-Native " system with French as the medium, in three sequential divisions—primary, higher primary and secondary—with a strict " winnowing " process at each stage ; so that in 1930, while the proportion of pupils in the primary stage (40,000) was only, as has been mentioned, one-eighth of the vernacular school population, again only about one-eighth (under 5,000) were to be found in the higher primary stage, and only 157 pupils reached the secondary classes.

It can only be mentioned here that in both these systems (as in the Malayan English schools) the aim is to reconcile Eastern and Western cultures, and that Western studies are combined with, and in some cases replaced by, Eastern. Thus, for example, the " General Secondary " school in the Netherlands East Indies has an " Eastern Literary " section, where Javanese, Malay, Indian history, culture and art are taught, in addition to its " Western Classical " and " Mathematical and Physical " sections ; while in Indo-China the culmination of the " Franco-Native " school system is a local " baccalaureat," based upon the " Far-Eastern Humanities," which since 1930 has been placed practically on the same footing as the French " baccalaureat."

As regards higher education, the Netherlands East Indies give education of a university type in a Medical High School, a High School for Law and a Technical High School; while in Indo-China the University of Hanoi was founded in 1918, and has Schools of Medicine and Pharmacy, a Law School, rudiments of faculties of Arts and Science and other departments.

Vocational Education

In both the Netherlands East Indies and Indo-China vocational education, other than for the clerical and teaching professions, has, as in Malaya, had to contend with traditional prejudice against manual labour—the description of Indo-China as " the country with long finger-nails " being particularly significant in this connection.

The vocational seed is sown, however, in the vernacular schools, the curriculum of which, like the Malayan, is given a definitely practical trend, and includes gardening, basketry and other handicrafts.

As regards special institutions for vocational training, there are various schools in the Netherlands East Indies, some giving instruction through the medium of Dutch, others through the potential *lingua franca*"—Malaysian. The list includes technical schools, schools for agricultural, veterinary and commercial education, and a school of navigation. Since 1920 simple native Craft Schools have been established in various centres to train local artisans.

In Indo-China, as in Malaya, vocational education has been a recent development. A 1930 educational survey states: " Indo-China did not organise its technical teaching until it had made a colony-wide investigation, lasting from 1927 to 1929, to find out which trades needed new recruits, and what numbers of these were necessary for each trade and for each country . . . an ill-considered development of technical training being as likely as, or more likely than, general education to create a group of individuals uprooted from their social strata " (Paul Crouzet).

The resultant organisation, wherein some 2,000 pupils receive vocational training, includes various centres for apprenticeship and elementary vocational training; professional courses affiliated to the " full-programme " schools for the revival of indigenous arts, such as the School of Cambodian Arts and Schools of Applied Arts; various industrial practice schools, each having its departments of carpentry, iron-work and electricity; and the technical departments of Hanoi University.

In conclusion, the following table gives in round numbers the respective public school populations of the Netherlands East Indies, Indo-China and Malaya. *All purely private schools* are omitted, the totals representing only public or subsidised institutions, and the Malayan figures being for 1932, the Netherlands East Indies for 1930–1 and the Indo-Chinese for 1930. While the exact measures of the educational efforts of these colonial Governments cannot of course be taken in statistics, it is interesting to note that in Malaya 4 per cent. and in the Netherlands East Indies $3\frac{1}{2}$ per cent. of the total population receives public instruction, while in Indo-China the figure is roughly 2 per cent. In Malaya a much higher proportion of the school population receives " Western " education than in either of the neighbouring systems.

PUPILS AT GOVERNMENT AND AIDED SCHOOLS IN NETHERLANDS EAST INDIES, INDO-CHINA AND MALAYA

	PUPILS RECEIVING INSTRUCTION THROUGH A VERNACULAR MEDIUM	PUPILS RECEIVING INSTRUCTION THROUGH A WESTERN MEDIUM	TOTAL	TOTAL POPULATION
Netherlands East Indies (1930–1)	1,667,000	170,000	1,837,000	52,000,000
Indo-China (1930)	340,000	50,000	390,000	21,000,000
Malaya (1932)	122,000	50,000	172,000	4,400,000

J. B. NEILSON.

BIBLIOGRAPHY

BRITISH MALAYA

Straits Settlements and Federated Malay States: (1) Annual Reports of the Education Departments; (2) The Education Code; (3) School Attendance and Registration of Schools Enactments.

Unfederated Malay States: Annual Reports of each of the Unfederated Malay States.

C. A. Vlieland: "A Report on the 1931 Census of British Malaya."

R. O. Winstedt: "The Educational System of Malaya" (Educational YEAR BOOK of the Columbia University, 1931).

NETHERLANDS EAST INDIES

"Algemeen Verslag van het Onderwijs in Nederlandsch Indie Over Het Schooljaar 1930–1."

"Handbook of the Netherlands East Indies, 1930."

Z. Stokvis: "Education in the Dutch East Indies" (Educational YEAR BOOK of the Columbia University, 1925).

G. Angoulvant: "Les Indes Néerlandaises (1926)."

INDO-CHINA

"Le Service de L'Instruction Publique en Indochine en 1930" (Gouvernement General de L'Indochine).

Paul Crouzet: "Education in the French Colonies" (Educational YEAR BOOK of the Columbia University, 1931).

GENERAL

H. A. Wyndham: "Problems of Imperial Trusteeship: Native Education" (Oxford University Press, 1933).

CHAPTER TWO

EDUCATION IN JAMAICA

I. The Jamaican People

THE work which education has to do in Jamaica cannot well be described without reference to the nature of its people. They include elements so diverse as the Negro, the East Indian, the Chinese and the European. The majority are Negroes, and a further large proportion is of mixed Negro and European descent. These two classes together number at least 95 per cent. of the population, and it is from these that the Jamaican people is being made.

Whatever may be the idiosyncrasies of private life, in public, professional and commercial life there is no colour line in the American sense. The island's schools reflect this. No separate provision is made in grant-aided schools for Europeans or for any other race. The primary schools contain all shades; and if children of pure European descent are not found in them, it is because there is no appreciable number of Europeans who need free elementary education for their children. Some parents send their children to England; some to small private establishments which prepare children to enter the island's secondary schools. But none of the recognised secondary schools are exclusively for white children, though some contain a higher proportion than others.

The bulk of the population is rural. There are few industries, and none compares in importance with agriculture. Commercial life is concentrated in Kingston. Most of the schools, therefore, and the primary schools in particular, are concerned with an agricultural people of Negro, or partly Negro, descent.

The Negro in slavery had no opportunity for development and every opportunity for regression. The habits of dependence, thriftlessness and laziness, the lack of proper pride in himself, his surroundings and his work, with which he has been so unfairly stigmatised, are not inherent in his character, and are by no means universal. But slavery encouraged them; and the emancipated slave, thus taught, was not readily transformed into a free and industrious labourer. He showed no love of work, especially of work for other men, and it was only gradually that he gained opportunity to work for himself.

A new chapter in his history was opened in 1898, when Sir Henry Blake's scheme of land settlement came into operation and the Jamaica Agricultural Society was founded. The Society, which is subsidised by the Government, has now 260 branches, 8,000 members and 16 full-time instructors. It is one of the most

important educational activities in the island. Besides improving cultivation, it promotes agricultural shows and local competitions for prize holdings, which include house and garden as well as crops and stock.

But these efforts have not yet succeeded in raising generally the standard of housing, which among the poorer classes remains unwarrantably low. The most obvious effect of this is upon health. The spread of disease and notably the high death-rate from tuberculosis are directly attributable to overcrowding at night, when every cranny is stopped up to keep out the ghosts. Bad sanitation brings hookworm, and the stagnant puddle in the yard breeds mosquitoes. The effect upon wealth is hardly less plain. Laziness is encouraged when there is nothing to work for except food, which is easily obtained. Artisanship languishes for want of demand and incentive.

A less obvious, but not less important, result to which overcrowding contributes is the high rate of illegitimacy, which exceeds 70 per cent. of all births in the island. Making allowance for those who live together permanently, though not legally married, there is no doubt that among the Negro population lasting unions are in a minority ; and it is equally certain, however views may differ upon the morality of this state of affairs, that it destroys the roots of the family and, if for that reason only, is a disease in the life of the people. This, again, is a legacy from slavery, when every new birth meant more property ; a legacy which one hundred years of freedom and fifty years of education have failed to abolish. Other causes contribute to this. Those which chiefly concern us here are the lack of employment for girls and the poverty of interest for young people in village life.

Country folk have few recreations. Market day is a social occasion and court day a dramatic entertainment. But crime is not often serious. Obeah, a form of witchcraft associated with poisoning, is believed to be declining, though its antidote, Myalism, still appears from time to time, even masquerading in Christian garb. Dancing, which in Africa has high religious and social importance, retains its hold in Jamaica as a pastime. One may see the shoulders of quite small children twitching with eagerness to join in. No sympathetic observer can fail to be struck with their sensitiveness to rhythm. Remembering the working songs which he hears among labourers and the whole-hearted singing of rhythmical tunes in church, the school worker may reflect that if the dance in its present form is not wholly good, yet rhythm and its expression might be made a powerful instrument of education.

The children when young are as bright and responsive as could be wished. Born of a people unaccustomed to writing and records, they learn by heart almost too readily, and it has been observed that their capacity for reasoning develops later than that of white children. Their language is English, but often so corrupt as to be scarcely understandable. Many, though well dressed, are

badly undernourished through the ignorance of their parents; and it is estimated that at least 80 per cent. of them have defective teeth, the most frequent cause of ill-health in the island. Nurses and midwives are few in the country districts and the infant mortality is double the rate in England.

Among large numbers of the people there is real desire for education, though naturally for the social standing it gives rather than for its own value. This results in a preference for literary above practical education. Among certain employers, happily a diminishing number, there is a prejudice against any kind of education; and one may be told in the same breath that the Negro is lazy and not worth educating, and that when he is educated he will not stay on the land, but goes where opportunities are greater.

The remedy for this lack of opportunity on the land has taken shape only in the last few years, when a development has taken place, comparable in importance and indeed a necessary counterpart to the Land Settlement scheme, in the establishment of a prosperous class of small-holders. With the foundation of the Jamaica Producers' Association, the parent of co-operative associations for handling various commodities, the small planter has been enabled to market his products on the same terms as the large, and co-operation, long declared to be an impossibility in Jamaica, has become a reality with good prospects of success. The example of other countries shows that a community of co-operative farmers can and does attain a higher level of practical skill, civilisation and culture than a community of large employers and landless labourers. The movement, though considerable enough to control its own ships, is still in its childhood, but it is not too much to say that it has changed the whole prospect of the Jamaican people and the situation with which education has to deal.

We may now turn to the education that is actually provided.

II. The Educational System

The Pre-School Child

Organised care of the pre-school child exists only in Kingston, where the Child Welfare Association, besides maternity work and the care and treatment of children in its crèche and clinics, employs nurses and voluntary workers for house visitation, gives advice on nurture, holds a Baby Show, conducts various forms of publicity and assists deserted mothers to obtain support for their children. This is a private organisation, receiving a Government subsidy.

The Bureau of Health Education

The work of the Child Welfare Association is supported by the Bureau of Health Education, which sends to expectant mothers a series of letters giving advice on pregnancy and child-birth, followed by a pamphlet on baby care. This Bureau is the chief agency for health education in Jamaica. Its inception was due to the Inter-

national Health Division of the Rockefeller Foundation, whose Director for Jamaica also directs the Bureau. Expenses are borne partly by the Foundation and partly by the Government. The Bureau issues a bulletin, *Jamaica Public Health*, 19,000 copies of which are distributed monthly, free of charge, containing articles for parents and teachers and health plays for children. It takes a principal part in the supervision of the Dental Clinics, the Hookworm Units and the Malaria Commission. It assists the Anti-Tuberculosis League and the Empire Health Week movement. All these activities are directly educative, and it would be difficult to overestimate the value to Jamaica of this American foundation, or to praise too highly the method by which its work is conducted. Its object always is to elicit local co-operation and to efface itself when local responsibility has been trained.

The Educational Ladder

A child may enter school in Jamaica at the age of four, if he lives within reach of an infant school or department. Of these there are but twenty-six and, for the majority, schooling begins from the age of seven upwards in an elementary school, where it may be continued until the age of fifteen. Subsequently a small number remain to continue their studies as pupil teachers. A few may pass into continuation schools, of which there are only three at present, or may obtain trade scholarships, tenable partly at the Government Technical School, partly in apprenticeship. There are also scholarships at the Government Farm School. A further small proportion may pass about the age of twelve, with a scholarship or free place, into a secondary school. Approximately 450 children at a time receive a secondary education in this manner. Other pupils enter the secondary schools from the age of ten years upwards, and follow a course leading generally to the Cambridge Local Examinations. Finally they may compete for the three University Scholarships awarded annually or for the Rhodes Scholarship or the Agricultural Scholarship. The last named is held at the Imperial College of Tropical Agriculture in Trinidad, the others in the United Kingdom or Canada.

Infant Schools

The infant schools of the island contain less than 5 per cent. of the children of appropriate age. They have for many years past suffered from lack of space, equipment and properly trained teachers. A small centre for teacher training, opened in 1931, has begun to remedy the most serious of these deficiencies, and when finance becomes easier it may be possible to proceed with a development that is widely desired. Infant schools may have an important effect upon the elementary schools, influencing their methods of teaching and providing some of them with better pupils. But the provision of schools for all the 73,000 children aged four to seven years is a large undertaking and not yet in sight.

Elementary Schools

The elementary school resembles its English counterpart of the late nineteenth century. Reform has been hampered by lack of money and by a tendency to imitate what is done elsewhere rather than to devise means suited to the island and within its resources.

At first the Churches provided the schools and were aided by the Government. This system developed the defects common to its kind, and a few years ago the Legislative Council declared itself in favour of " nationalisation " of the schools. The local communities were thus relieved of a responsibility which the Government can only gradually assume, though it already bears the whole cost of running the schools, except the maintenance of buildings. Of the 655 primary schools (infant and elementary), 506 are still owned by the Churches, and though some of them make courageous efforts to improve their buildings, there are numbers which should be condemned even by local standards.

Since the expenditure for each child in average attendance is about £2 2*s*. per annum, of which 86 per cent. is absorbed by teachers' salaries, there is little money available for equipment. The rule that the children must bring their own books and materials falls hardly on the child of poor parents and raises much difficulty in the adoption of new books.

So recently as 1920 a system of payment by results was still in force, the ill effects of which are yet to be seen in aims and methods. Though it no longer determines the grant, the annual examination, required by public opinion as well as by the Code, still looms too large upon the school horizon.

The Code

The curriculum is laid down in thirty-two pages of the Code, but there is hope that it may shortly be removed to greater freedom. It consists of Reading and Recitation, Writing, English Grammar and Composition, Arithmetic, Elementary Science (including Nature Study, Hygiene and Housewifery), History and Geography, Scripture and Morals, Drawing, Handwork, Needlework, Singing, Gardening, Advanced Manual Training and Drill. These are set out by Standards and Divisions, regarding which the Code ordains as follows : " All Schools on the Annual Grant List will be examined according to these Standards and Divisions. The maximum credit for efficiency will be given at Inspection only when the whole of the subjects mentioned in the Syllabus are taken, and when the school as a whole has attained to the high degree of proficiency that is reached under very good teaching."

The intention is admirable. But with the limited resources of the schools and with large numbers of children attending irregularly, it is evident that so extensive a programme cannot be properly carried out. In effect, some of the most necessary activities, such as physical training, handicraft, housecraft and gardening, are those which receive scantiest attention. The old method of payment by

results naturally gave prominence to those subjects which could be most easily examined; and the tradition persists. Tradition also is on the side of literary education; the parents prefer it; the teachers are trained in it. Unhappily for the reformer, it is also the cheapest if not the most economical kind to provide.

Though the curriculum is bookish, there are but few books. Apart from shortage of money to buy them, there have been, until recently, hardly any books suitable for West Indian schools. With the appearance of the West Indian Readers, Geographies, Service Books and Poetry Books, the prospect has improved, though the money has still to be found. The *Bulletin of the Bureau of Health Education*, with its health plays and topical articles, is a great improvement on the ordinary textbook of hygiene. The plan could well be applied to other reading matter.

Space does not permit a fuller description of the elementary-school work; nor can justice be done to the good that is accomplished by many of the schools in spite of their difficulties. It will be evident, however, that they need to be brought into closer touch with the realities of Jamaican life.

Attendance, Voluntary and Compulsory

Attendance varies greatly at different seasons of the year, and even on different days of the week; on Friday, for example, the day before market day, less than one-third of the mid-weekly attendance can be expected. This causes constant disparity between staff and numbers. Attendance also falls rapidly from the age of ten onwards. Consequently the lower divisions are overcrowded and the upper attenuated. Many children never pass beyond the third standard. The wastage of the slender resources of education by irregular attendance is very great.

Compulsory education was sanctioned by law in 1892, and actually applied to certain districts from 1911. It has not been a success, since the machinery for enforcing it is wholly inadequate. If it were to be enforced there would not be room for all the children in school. The average attendance is now only 55 per cent. of the enrolment, and there are in addition more than 45,000 children of elementary-school age who never attend school. To make compulsory education effective would cost more than the Government can at present afford.

None of the remedies proposed for these problems of accommodation and attendance, such as a reduction in the age range, a half-time system, or making admission to school conditional upon regular attendance, has yet found general acceptance. The question is bound up with that of post-primary education and will be referred to again.

The Elementary-school Teacher

Training is begun in an elementary school as a pupil teacher. Having passed three annual examinations, the intending teacher

may be registered as an assistant, taking thereafter the training-college examinations externally, or he may gain admittance to a training college for a two- or three-year course. There are four training colleges, one of which is the Mico College, whose reputation extends throughout the West Indies.

The training colleges are recruited almost entirely from the elementary schools. The number of students who have attended a secondary school is negligible. Forty-two per cent. of the teachers in service have had no college training. As pupil teachers they were regarded primarily as members of the staff, and many of them were neither properly taught nor trained. The restricted training of teachers and their lack of further training in service are the weakest points of the schools.

Teachers' salaries range from £30 per annum for the lowest grade to £200 per annum for the headmaster of an A grade school, with a house or house allowance in government schools.

Private Schools

There exist a number of private establishments, so various in their standards that no general description is possible. There is one preparatory boarding school resembling its English prototype. There are small day schools which prepare for the secondary schools. Others, for girls chiefly, take their pupils farther. Others, again, undertake to prepare for commercial life. And there are hedge schools which serve no useful purpose. Regarding the day preparatory schools, the criticism has been made that their pupils are often found to be not so well grounded as elementary-school children: without endorsing this, it may be said that they would benefit by inspection, not necessarily official, but possibly arranged by the secondary schools themselves. In order to deal with hedge schools, the Government should have power to require the closing of those that are doing more harm than good. The only power in this matter that exists at present is in areas of compulsory attendance, where the School Board can refuse to recognise attendance at an inefficient private school. But as compulsion is ineffective, so is this power also.

Special Schools

Juvenile delinquents and orphans are provided for in fourteen industrial schools and orphanages. The training given is much more practical than that of the elementary schools, and, in the view of many, more suitable for the majority of Jamaican children. There is no provision for physically or mentally deficient children other than the small school for the blind maintained in Kingston by the Salvation Army, with some assistance from the Government.

Continuation and Technical Schools

Four of these schools are officially recognised; the Government Technical School in Kingston, for boys and girls, the Government

Farm School for boys, and two grant-aided continuation schools for girls. There are several unrecognised schools of the " business college " type, and one, under the management of an American Mission, in which academic education has to be earned by work on the farm or in the workshop. This is a plan that deserves watching.

The Government Technical School has lately been reorganised, and with an augmented staff now offers courses in domestic science, woodworking, building, engineering and commerce, accompanied by continuation of elementary-school work. The trade scholarships awarded from elementary schools are held partly at this school and partly in apprenticeship. There are also courses for the pupils of Kingston elementary schools, for students in training colleges and for elementary-school teachers.

The Government Farm School, which is under the management of the Department of Agriculture, has also been lately reorganised. It gives a practical training to between fifty and sixty boys. The effect of its work is less widely felt than it should be. Being a detached unit, it does not influence other schools or more than a small proportion of the island's agriculturists.

The two grant-aided schools for girls, though including practical occupations such as housecraft in their work, are more concerned with books. Their intention is to carry on elementary-school studies and to train womanly character. The results they obtain show the good quality of their material and the generous return that awaits sympathetic guidance. But in preparing their students to maintain or occupy themselves in after-life their objectives are less clear ; and the importance of this can hardly be over-emphasised in Jamaica, where too many educated girls find nothing to do.

It will be seen that the continuation and technical schools, though potentially of great influence, play at present a comparatively small part ; and that few of the island's young people have any kind of training in skill, whether for work or leisure.

Secondary Schools

Approximately 2,000 children are receiving a secondary education in nineteen recognised schools, some of which have a long and honourable history. They were modelled on the English grammar school, and have generally so continued, with the changes introduced by the requirements of the Cambridge Local Examinations. They are required to work up to the standard of these examinations and also to provide free places for 20 per cent. of their numbers, in order to earn their grant. None of them are wealthy, and the resources of some are not enough to equip them properly or to obtain fully qualified assistant staffs.

A satisfactory number of passes is obtained at the examinations, but successful candidates are not infrequently found to use indifferent English and to lack knowledge of their own country. It is to be suspected that the influence of these examinations, however necessary they may be to maintain recognised standards, is not

wholly good; and, indeed, if English education is found to be thwarted by examinations conforming to the standards of university entrance, what result can be expected of similar examinations in a tropical colony, where those proceeding to a university each year could be counted on the fingers? A hostile critic might say that 2,000 children are following a course dictated by the requirements of less than 1 per cent. of them. It cannot be said that these university requirements have developed any distinctive discipline in the schools. It is not a linguistic discipline, though requiring the study of ancient or modern tongues, whose "surrender value" at the age when their study commonly ends is highly doubtful. It is certainly not scientific. And the combined effect of an examination syllabus on the one hand and limited staff and equipment on the other is to restrict the opportunities of the school for experiment and of the pupil for developing his own bent. Considering that for the greater number of their pupils the secondary schools represent the last stage of formal education, it would be fair to ask what outlook they are giving, what vocational and recreational guidance, what conception of the problems of their country and of mankind? Not every school with a good examination record could give a satisfactory answer.

Most of them, however, do solid work on traditional lines. Games and athletics have recently been considerably improved, and the development of Scouts and Guides is much to be welcomed.

University Scholarships and Examinations

The intending university student must either study privately or look outside Jamaica for his university education. Two scholarships of £250 and £80 per annum for three years are awarded annually to boys, and one of £250 per annum to girls, besides the Agricultural Scholarship of £300 per annum and the Rhodes Scholarship. Steamer passages are provided for holders of government scholarships. For external students the examinations of London University in Intermediate Arts, Science and Law are held regularly, and those for B.A. and B.D. as occasion requires.

Central and Local Authorities

In addition to the Director of Education and his staff, the Governor is advised with regard to primary schools by the Board of Education and upon secondary schools by the Jamaica Schools Commission, which has also certain executive powers. The immediate local authorities for primary schools are the correspondents of government schools and the corresponding managers of "voluntary," i.e. non-provided, schools. There are twenty-one local School Boards, which supervise the government schools, appoint their correspondents, and may also appoint visitors for voluntary schools. Secondary schools have their own governing bodies, which are responsible to the Jamaica Schools Commission. The Govern-

ment Technical School, Farm School and Industrial School have each their Advisory Boards, and the two principal training colleges their Boards of Directors. It will be seen that both central and local administration depend largely upon voluntary services.

The Government retains control through its grants in aid, which are conditional upon the observance of the Code, a volume of considerable length and intricacy. Its articles are made or amended by the Governor in Privy Council, but can only take effect after confirmation by the Legislative Council, which is a body partly elected by the people.

Finance

No difference is made between government and voluntary schools in payments from public funds, except with regard to buildings and sanitation, for which the voluntary schools receive half the cost of repairs and new work. The Government bears the whole cost of the staff, upon scales fixed according to the grade and service of the teachers employed, and makes small grants for equipment, libraries, sewing, gardening and manual training. Primary education is free, but the children's books and materials have to be provided by the parents.

The secondary schools receive a capitation grant varying with the age of the pupil and the grade of the school. Some of them have endowments. Their fees are low: £60 per annum is charged in one of the principal boarding schools for boys; £12 per annum is a usual charge for a day school of the first grade. The privately owned continuation schools and training colleges receive block grants and are otherwise financed by fees, endowments or denominational funds. The industrial schools and orphanages have also individual grants, together with a payment for each child made by the parish whence it comes.

Dental clinics operating in primary schools are maintained in certain parishes from parochial funds, sometimes with assistance from the Government and the Rockefeller Foundation. Grants are also made to the Child Welfare Association, the Boy Scouts Association and the Salvation Army School for the Blind. The Jamaica Agricultural Society, whose educational activities have already been mentioned, receives a grant of £11,000 per annum. The Institute of Jamaica, which contains a library, a museum and a historical picture gallery, is wholly maintained by the Government.

III. Development

Surveying the whole field, a critic cannot find as much to praise as he would like in the present state of education in Jamaica, unless it be the efforts of many who are working there with inadequate resources and an impeding tradition. He finds a system out of touch with the needs of the country; needing liberty to adapt itself, yet bound in an elaborate Code; not using, therefore, its limited means to best advantage. Yet the elements of a better situation

are not wanting; and viewing the progress which Jamaica has made in other directions within recent years, particularly in popular co-operative enterprise, it is reasonable to expect considerable changes in education, as its function becomes popularly understood. It may therefore be useful, without attempting to prophesy, to review outstanding needs, and the means, existing or proposed, to satisfy them. In doing so, the writer expresses only his personal opinions.

The first need is money. An expenditure from public funds of 4*s*. 3*d*. per head of population is clearly not enough for bare necessities. Space does not permit a discussion here as to whether the increase should come wholly from central or partly from local funds. But it seems beyond doubt that a sound and stable finance can result only when the people who benefit most from public education bear directly or indirectly most of its cost. To make this possible in Jamaica, those who cultivate the land must have more wealth.

Adult Education

The first interest, therefore, of those who would benefit any branch of education is that there should be active adult education for better agriculture, for co-operative buying and marketing and for a higher standard of living. The success of the demonstration agents who work among the rural negro population in certain States of America shows what can be done to improve agriculture and living conditions among a negro peasantry; while Young Farmers' Clubs and similar organisations for various branches of housecraft provide a practical training in co-operation, and a favourable soil for the growth of the co-operative spirit which is even more necessary. In the latter connection the excellent preparation given by Scouting and Guiding should not be forgotten.

For this work a force of travelling teachers, both men and women, would be required. The nucleus exists already in the instructors of the Jamaica Agricultural Society. But they need a wider scope and new objectives. There are various kinds of live stock to be raised, houses to be built, the arts of homemaking to be practised, crafts to be learnt, the last especially for unoccupied women. Some teachers would have demonstration cars, supplemented perhaps by a travelling cinema. But large expenditure on buildings and equipment would not be needed and funds would be concentrated on the essential point—the teacher.

Adult education has been given first place for economic reasons. There are others, educationally more cogent, which need not be argued. It is evident, for example, that the teaching of the schools, particularly in health and morals, will have small effect if it is counteracted by the example of the homes; that the advance in morality and culture of the people depends partly on their having a higher material civilisation; and that no system of popular education is fully effective if it does not bring all the people by some means under its influence.

Senior Schools

Turning to the schools themselves, we find that it has been decided to spend, when finances improve, a considerable sum upon continuation schools. It is to be expected that these will eventually assimilate the senior classes of the neighbouring elementary schools, becoming senior schools, parallel to the secondary schools, but with work and aims appropriate to a different type of pupil.

Primary education at present begins with battalions of children, and ends with a diminished band straggling upon a road to nowhere. The wastage, especially among boys, starts at ten or eleven years of age, when they begin to feel independent, can occasionally earn small wages and see no object or interest in remaining at school. Yet classes must be provided and staff assigned to them for such as do attend, and the overcrowded lower divisions are consequently starved.

The remedy proposed is that which has been found necessary elsewhere ; a clean cut at the age of eleven. Junior work can then be made more thorough in essentials and more appropriate to young children, especially in physical training. These schools might eventually extend downwards to include infants. The seniors would pursue in separate schools a course suitable to their ages, interests and prospects, and lasting as long as can be afforded. Some, having suitable abilities, would be transferred to secondary schools as they are at present.

A full discussion of the senior-school curriculum is not possible here, tempting as it is. We may expect it to have a strongly practical bias, generally rural and closely in touch with local conditions. Classroom studies would be linked in every way possible with practical activities, whose value could be recognised by the pupils and their parents. There would be more individual work than in the junior school. The pupils would learn to use the means of learning, and from their use in guiding practical work might come in time to regard books as counsellors and friends. The way would be well prepared for the travelling teacher of adults to carry on the work of education continuously. Games and gymnastics would be encouraged, co-operative activities and the sense of corporate life would be fostered, and nascent religious instincts given expression.

Such schools, while keeping the future of their pupils always in view, are not intended primarily to teach a vocation, but to train the " thinking hand," the manual ability and the bent of mind that will not only pick up an occupation without difficulty, but will go on learning in and by means of it. If the methods of the school are practical, and are applied always in a spirit of making the best use of environment, there is no fear that skill, whether of the soil, the craft, or the home, will lag behind.

One further aspect of these schools deserves mention, for it is fundamental. The people should feel that the schools are theirs

and should be able to use them for other community purposes. The buildings themselves have much influence. Well conceived, they may become an abiding example and inspiration, as well as a source of pride to the community. There is need in Jamaica for a school architect with sympathy and imagination.

Technical Schools

From the Senior School it is a short step to the Technical School and the Farm School. Here standards are being raised, and we may expect the process to continue until well-prepared entrants are being supplied to the principal industries and adequate part-time courses are provided for their continued education. We may look also to these schools for the training of travelling teachers for adults. Among other developments, courses in applied art at the Technical School will probably be the natural means to encourage the practice of art among the people, in connection with the houses they build, and the articles they make.

Higher Education

In the secondary schools, the principal improvements to be hoped for are a lightening of the examination incubus, or at least its framing upon lines more suitable to Jamaica, and more of the spirit of enquiry into the things needed for to-day.

Changes in the training of teachers are implicit in the developments that have already been considered, and the training colleges, instead of doing much secondary work themselves, would receive pupils who have completed a senior or secondary-school course. We may expect also their expansion, so that gradually the untrained teacher may be eliminated. Meanwhile the training of teachers already in service will be much advanced by the increase in the number of assistant inspectors, who are all experienced head teachers, to the end that groups of schools may be given constant supervision and assistance in place of occasional inspection.

The training of teachers, particularly of the higher grades and secondary schools, would greatly benefit by association with university teaching. The question of a West Indian University was revived at the West Indies Conference in 1929, and several proposals have appeared for institutions varying from a complete university to a college offering preparation for the first stages of a degree in medicine, engineering or law. The invariable obstacle is expense; and the opinion prevails that, rather than have a cheap and inferior university, it is better to have none and to apply the available funds to scholarships, tenable at universities of recognised standing. But the number of young people who can benefit by these scholarships must always be small; and the absence of local university education is a disability not only to the island's youth, but to its whole civilisation and culture.

Eventually this must be remedied either by the island itself or

in co-operation with other colonies. For the progress of the Jamaican people depends ultimately on themselves, and they must raise up men who will bring inside acquaintance and ripened minds to the study of the needs of Jamaica and the evocation of her ideals; leaders in religion, in education and in thought who will quicken the spiritual advance without which material progress is of little worth. We who are not Jamaicans can help greatly. But we cannot fully understand the outlook of the black man upon his life, nor can we feel what the better part of him is capable of becoming; and the coloured man is not less problematical. The administrators of their education must ever reflect that history may show their best efforts to have run contrary to the genius of the people. Yet education without a plan ends in waste and confusion. We have to think out what we intend education to do for the Jamaican people, but not narrowly or rigidly. Perhaps we shall do best not to lay too much emphasis upon what is wrong with Jamaica, and seek to cure that by an educational medicine, but rather find what is right with Jamaica and try to develop that with educational food. We shall find foremost among the good things that Jamaica offers now the possibility of a full and happy life for most of her people upon the land.

S. A. HAMMOND.

JAMAICA: COLLEGES, SCHOOLS, SCHOLARS 1930-1

POPULATION				UNIVERSITY EDUCATION		SCHOOL EDUCATION GENERAL			SCHOOL EDUCATION VOCATIONAL				
				ARTS AND SCIENCE COLLEGES	PROFESSIONAL COLLEGES	SECONDARY SCHOOLS	PRIMARY SCHOOLS	TOTAL	MONO-TECHNICAL TRAINING SCHOOLS	OTHER TECHNICAL SCHOOLS	CONTINUATION SCHOOLS WITH VOCATIONAL TRAINING	INDUSTRIAL SCHOOLS AND ORPHANAGES	TOTAL
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	CENSUS 1921	ESTIMATED 1930	Institutions :										
White . .	14,476	—	For Males .	—	1	6	3	10	1	—	—	8	9
Coloured .	157,223	—	For Females	—	3	8	4	15	—	—	2	6	8
Black . .	660,420	—	Mixed .	—	—	5	648	653	—	1	1	—	1
East Indian .	18,610	—											
Chinese .	3,696	—	Total .	—	4	19	655	678	1	1	3	14	18
Not stated .	3,693	—											
			Pupils enrolled :										
Male . .	401,973	493,671	Male . .	—	56	1,100	65,221	66,377	56	137	137	725	918
Female .	456,145	528,481	Female .	—	91	1,061	68,791	69,943	—	118	240	389	629
Total .	858,118	1,022,152	Total .	—	147	2,161	134,012	136,320	56	255	377	1,114	1,547
Percentage of Urban Population (towns over 1,000) . . .		14·8											
Percentage of Non-urban Population . .		85·2											
Percentage of Urban Scholars . . .		17·5											
Percentage of Non-urban Scholars . . .		82·5											
Children of age 4 to 6 +		78,000											
Children of age 7 to 14 +		182,000											

NOTES

Column 6. Training Colleges for Teachers.
Column 10. The Government Farm School.
Column 11. The Government Technical School, Kingston.
Column 12. Includes totals of Column 11.
Column 14. Does not include totals of Column 11.

Foreign Countries

CHAPTER ONE

Education in Austria

A TREATISE on Austrian education falls naturally into three sections: the old Austrian school system as it had developed up to the period of the world war; the period of reform following the collapse of the monarchy and the foundation of the Austrian Republic; and, finally, the new organisation of the schools as worked out during the reform period and embodied in the Education Act of 1927.

I. The Old Austrian School System

The nineteenth-century school system was the child of the revolution of 1848. The task of educational reconstruction was taken in hand immediately after the inauguration of the constitutional régime and, so far as the secondary schools (*Mittelschulen*) were concerned, was fairly rapidly completed. The development of the modern elementary school system (*Volksschulen*) was interrupted by the reactionary interlude following the restoration of absolutism and was completed only after the re-establishment of constitutional government in 1867, by the passage of the Elementary Education Act of 1869.

Elementary Schools

Since that date the period of compulsory education has remained fixed at eight years, from the completion of the sixth to the completion of the fourteenth year of age. The State and its subordinate authorities, the provinces (*Länder*) and the towns, have been responsible for the establishment and maintenance of elementary schools, their inspection being in the hands of the central government. Private schools are recognised only if and so long as they conform to the curricula and other requirements laid down by the central government. The schools are common to all denominations. Religion is, it is true, an obligatory subject of instruction, being taught in accordance with the regulations of the various churches, but, by an express provision of the constitution, the other subjects of instruction are "independent of the influence of any church or religious community." This compromise between

the liberal tendencies of legislators and the still powerful influence of the Catholic Church remains the law to-day, though attacked by church advocates of a denominational school system. Various points of controversy—for instance, the question whether children whose parents had left the church should still be under obligation to receive religious instruction, and the issue of compulsory participation in religious observances—were settled from time to time in various ways according to the momentary balance of power between the clerical and anticlerical parties. In its later period, the monarchy tended to conform more and more to the wishes of the church. After the revolution of 1918 the " freedom of creed and conscience," guaranteed by the constitution of 1867, was reaffirmed in full, but recently, since 1932, there have been signs of a reversal of policy.

In the cities and the larger towns the eight-year elementary school is organised in eight classes, but in districts where sparsity of population necessitates the inclusion of more than one age-group in the same class, there are schools with four, three or two classes and, in the smallest mountain villages, even single-class schools. The fully organised eight-class elementary school was further organised into a five-class lower grade (the *Volksschule* in the narrower sense) and a three-class higher grade (the *Bürgerschule*, or higher elementary school). All these were compulsory schools, designed to impart a compulsory minimum of education. Thanks to them, illiteracy has been entirely eliminated, at least in the German-speaking territories of old Austria which are now included in the republic.

Secondary Schools

Attendance at secondary schools (*Mittelschulen*), designed to give a higher general education, was optional. Entrance was by examination. Candidates must have attained the age of 10, and must have passed out of the fourth or fifth class of the common elementary school. The main lines of their organisation were laid down by the Scheme of 1849 for *Gymnasia* and *Realschulen*. Originally, preparation for the university was confined to the eight-class humanistic *Gymnasia* teaching both Latin and Greek. The *Realschulen*, which did not teach Latin, had seven classes and were at first designed to give a more practical and technical education, but in time they developed into schools of general education competing with the *Gymnasia* in the preparation of students for all institutions of higher education (*Hochschulen*), the university as well as the technical high school. Being limited to seven classes, they were not absolutely equal in status with the *Gymnasia*. From 1908 onwards there appeared in Austria, as in Germany, the mixed forms of the *Realgymnasium* (Latin and one modern language) and the *Reformrealgymnasium* (one modern language and Latin), the latter being specially designed for girls. These schools were organised in eight classes like the *Gymnasium* and had equal status with

it as preparatory schools for the university. They became increasingly popular and developed steadily at the cost of the humanistic *Gymnasium*. All these types of secondary education led up to a statutory examination, the *Maturitätsprüfung*. The certificate of this examination (*Reifezeugnis*) served as a matriculation certificate for entry into the *Hochschulen*.

Higher Education

Originally the only institution of higher education was the university, but in the course of the nineteenth century there grew up, side by side with it, a variety of specialised professional *Hochschulen*, in particular the technical high schools. Their present organisation is described in the third section of this chapter. Similarly, there arose, side by side with the secondary schools of general education (*Gymnasia* and *Realschulen*), various types of professional secondary schools, both of higher and of lower grade. As their organisation has not been materially affected by the reforms, they will be discussed in the third section of this chapter, as also will the continuation schools (*Fortbildungsschulen*), which represent a partial compulsory extension of the common elementary school. The same remark applies to the training of teachers, in regard to which various reforms are under consideration but have not, as yet, been carried very far.

II. The Period of Reform, 1919–27

The end of the world war brought with it the collapse of the Austro-Hungarian monarchy and the dismemberment of a territory containing a population of 49½ millions and constituting a single economic unit. The name Austria was inherited by a small State of 6½ million inhabitants, which found itself faced with the task of rebuilding its political and economic life under unexampled difficulties. It was the conviction of the first Minister of Education under the republic, tne Social Democrat, Otto Glöckel, that an important part of this task of restoration must be a fundamental reconstruction of the whole educational system. The old Austrian school system was well adapted to the purpose of an ancient State and a more or less absolute monarchy. Its task was to train useful and amenable " subjects " ; a democratic republic would need rather citizens independent in thought and conscious of their responsibilities. The old school organisation had served, though no doubt unwittingly, the needs of a thin upper stratum of society ; the schools of the republic would have to guarantee to all the children of the people an equal right to education, so far as was compatible with the existing distribution of property. The reform scheme, therefore, as it was elaborated by the new " Reforms Department " of the Ministry of Education, and popularised by the indefatigable advocacy of Glöckel, had a double aim : to raise the level of education for the general mass of children, and to introduce fairer and more democratic methods of selection for that minority who are

fitted to receive a higher education than that of the common elementary school. The first aim involved a change in elementary curriculum and methods; the second a more fundamental reconstruction of the school system, based on a new conception of the interplay between the elementary and the secondary school.

The New Scheme of Elementary Education

The characteristic of the new elementary curriculum is that it aims throughout, from the earliest age-grade onwards, at independence of thought and action, in contrast to the old system under which training in independent and critical thought was regarded as the prerogative of so-called higher education, while the elementary pupil was expected to confine himself to the passive acceptance and memorising of a narrowly restricted body of knowledge. If this aim is to be attained, elementary education must, in the first place, be based not on books remote from the child's life, but on his actual environment—on the principle that education must be "childlike" (*kindertümlich*) and "native and familiar" *bodenständig*). Next, from the outset, education should not be split up into artificially distinguished "subjects of instruction," partitioned off from each other by the time-table and the clock, but should start from some "region of life," integrally conceived as the point of departure for branching paths leading on to the various departments of knowledge, and as a field where the pupil can exercise his various capacities—on the principle of the "all-embracing instruction" (*Gesamtunterricht*). Finally, knowledge should not be offered by the teacher in ready-made form and mechanically assimilated by the pupils, but should be worked out by the children for themselves, as an enjoyable form of activity—on the principle of "learning by activity" (*Arbeitsunterricht*).

These principles were not new to the experts. They had been elaborated by progressive teachers in all civilised countries and had, indeed, been, in part, experimentally applied elsewhere on much bolder and more radical lines than in Austria. What was new in the Austrian policy was the attempt to apply the new methods, so to speak, on a broad front and at one blow, to the whole educational system of a nation; and this attempt committed Austria to a peculiarly democratic mode of advance. This is indicated by the fact that the new curriculum was not laid down by dictatorial decree from above. The Reforms Department of the Ministry only issued a preliminary scheme, which was put to the test of practice in hundreds of "experimental classes" in the year 1919–20. After it had been remodelled on the basis of the experience thus gained by the teachers, it was next recommended for general trial, first for a period of one year and then for several years. In all parts of the country teachers worked together, in hundreds of voluntary associations, at the development and perfecting of the new methods—but most notably in Vienna, where, in 1920, Otto Glöckel, who had then retired from the State Ministry of Education, took over the chairmanship of the

municipal Council of Education and thus became the leader of the reform movement in the city. After long deliberations and protracted controversies connected with the general politics of the country, the new curriculum was eventually enacted in definite form, with only slight modifications, by a conservative Minister of Education—a proof that the principles on which it had been based had been found to be workable in practice and had remained unshaken by criticism. That it is already realising the hopes of its authors is evident from the testimony of many experts from all parts of the world, who have visited the schools of Vienna year by year and have not only been able to observe the lively zest in work shown by even the youngest children, combined with a touching seriousness, keen independence and a willing sense of discipline, but have also been impressed by the really astonishing successes which the children have achieved.[1]

The New School Organisation

The second aim of the new movement, a more democratic selection of students for higher education, proved more difficult of attainment. What was needed in this sphere was not merely a change in curriculum and methods of teaching, but a reconstruction of the whole school system; and this required, not merely new administrative circulars or regulations, but an amendment of the Education Acts. Such an amendment of the law could, however, only be brought into force under the new constitution if the legislative bodies of all the newly federated provinces could be induced to pass identical resolutions, or if a two-thirds majority could be secured for the amending legislation in the Federal Parliament. In practice, in the existing state of party politics in Austria, this meant that a new Education Act could only be passed with the consent of all the political parties, including both the *bourgeois* majority and the Social Democratic minority.

In the view of the reformers, the vital defect of the old school system was that the path of higher education through the secondary school (*Mittelschule*) branched off finally from the common elementary school at the early age of 10 so that in practice any transfer at a later age was almost impossible. Since, however, no really

[1] A detailed description of the whole educational reform movement is contained in H. Fischl, *Wesen und Werden der Schulreform in Osterreich* (Deutscher Verlag für Jugend u. Volk, Vienna, 1929). Among other works on the same subject (in addition to works in Swedish, Czech, Polish and Turkish) the following may be mentioned: R. Dottrens, *L'éducation nouvelle en Autriche*, with a preface by P. Bovet (Neuchâtel, Switzerland, 1927); R. Dottrens, *La education nueva en Austria*, translated by R. Llopis (Beltran, Madrid, 1929); R. Dottrens, *The New Education in Austria*, edited by P. L. Dengler (The John Day Company, New York, 1930); Jean Dupertuis, *Vers l'ecole unique, Les Internats Publics de Vienne* (Flammarion, Paris, 1933). In using these foreign works, the reader should, however, note that they do not always distinguish accurately between experiments based upon the original plan of reform and the compromise system eventually established.

informed, final and reliable judgment on a student's eventual bent towards scientific study could be passed at this early age, before the physical and mental crisis of puberty, any decision to enter a child for a course of secondary education must involve a certain risk, with the result that the decision tended to be taken, not purely on the ground of the child's fitness for a course of higher education, but on economic or social grounds. In other words, the general tendency was (of course with many exceptions) that access to higher education, and consequently to positions of authority in political and economic life, was reserved to children whose parents, in view of their means and social position, were comparatively well able to take this risk. A further result was that, though the secondary schools were supposed to be selective schools, a large percentage of their students possessed very slender abilities, while many highly gifted students, well fitted for higher studies, found themselves irrevocably committed to the blind alley of the elementary and higher elementary schools (*Volksschulen* and *Bürgerschulen*).

The Plan of the Universal Secondary School

Thus arose the demand for a " common school system " (*Einheitsschule*) up to the fourteenth year of age ; that is, that all children should be taught in one common school for the full period of compulsory attendance and that selection for the secondary school should be deferred until the end of that period, when capacities and inclinations have manifested themselves more clearly than at the age of 10. This demand involved the establishment of a universal compulsory secondary or intermediate school for the age groups 11–14.

Since, however, differences of capacity, both in kind and in degree, come gradually into evidence between the eleventh and fourteenth years of age, it was realised that the compulsory school for these age groups, the universal secondary school (*Allgemeine Mittelschule*), must not be organised as a uniform type, but must be so elastic and so differentiated as to provide both for the development of relatively " backward " children and for the guidance of the more gifted towards the highest grade of education within the reach of their abilities. For this purpose these schools were to be organised in two parallel series of classes and a choice of optional subjects was to be offered.

This scheme of the *Einheitsschule* up to the fourteenth year of age—or, to use the English phrase, " secondary education for all "—was, for Austria, no Utopian conception. Even in old Austria, in contradistinction to Germany or France, a completely common system of education had existed at least up to the age of 10. There were no " preparatory " schools, serving the secondary schools. And this system had proved its worth. Moreover, the old higher elementary school—the so-called *Bürgerschule*—with its staff of specialist teachers, had represented a certain approximation to the idea of a common secondary school. Consequently, the city of

Vienna was able to proceed, as early as 1922–6, with an experimental conversion of the upper grade of the compulsory elementary school into an *Allgemeine Mittelschule*. This experiment was conducted on a large scale embracing in the end nearly 3,000 children. In the autumn of 1926 a number of leavers passed, for the first time, from these experimental schools directly, without special examination, into the lower classes of the upper secondary schools (*Obermittelschulen*), where they " made good " in a surprising way.

The Reform of the Secondary Curriculum

At the same time an attempt was made to follow out the idea of the *Einheitsschule*, in another direction, by reconstructing the curriculum of the secondary school itself. Apart from the discontinuity between the elementary and the secondary school, the secondary curriculum had suffered from a defect inherent in its past development. From the lowest class onwards it had been split into several sharply distinguished courses—the *Gymnasium*, the *Realgymnasium*, the *Realschule*, etc. Transfer between these was difficult, if not impossible ; and a mistaken choice, once made, could hardly be corrected. A demand consequently arose for a unification at least of the lower grades of all these types of secondary school—a demand, that is, for a uniform lower secondary school. A uniform school of this kind had been experimentally established in various districts as early as 1920, under the name of *Deutsche Mittelschule*. This type of school served as a valuable forerunner of the future *Einheitsschule*, since its curriculum was, on the whole, in close correspondence with that of the new *Allgemeine Mittelschule*.

The chief feature of the new curricula in these two reformed types of school was a postponement of purely linguistic education. The pupil did not begin the study of a first foreign language until his twelfth year, and the time thus freed was used to lay greater stress on the natural sciences, on physical culture and on art, while instruction in handicrafts made its first appearance in the secondary school as a compulsory subject. As regards method, the principle of " learning by doing " was applied in all departments.

The Selective Upper Secondary School

Under the reform scheme, the ladder of higher education was to be erected on the summit of this common four-year intermediate school, in the form of an upper school of general education (*Allgemeinbildende Oberschule*), which was also to be a four-year school. This type of school, moreover, was to break away from a tradition which, in spite of constant criticism, had been common to all the old types of secondary school—the tradition of an encyclopædic education, resulting in an overloaded curriculum and in superficiality of teaching. Instead, the new type of school was to be based on the principle of " specific general education " : that is, the curriculum was to be focused in one central field of work, according to the

capacity and bent of the students, and intensive teaching was to be concentrated on this field, while the other subjects were to be treated in abbreviated form, as serving to complete and round off the student's general knowledge. Plans were made, and practical experiments carried out, for the establishment of " German Upper Schools " (*Deutsche Oberschulen*)—such as schools for Ancient Languages, Modern Languages, Mathematics and Natural Science. All these were to be of fundamentally equal status, as opening the way to all branches of study in the universities and other institutions of higher education (*Hochschulen*).

The Acts of 1927

These experiments having been carried out, the time seemed ripe for a permanent reconstruction of the school system. As already pointed out, this could only be effected by agreement between all political parties. After a prolonged parliamentary struggle, an amendment of the law was finally voted unanimously in the summer of 1927. Two new Education Acts, regulating respectively the intermediate (*Hauptschule*) and the secondary school (*Mittelschule*), marked a significant victory for reform, in substance, if not in certain external features.

What was not secured by these Acts was the universal compulsory secondary school for all children of 11 to 14 years of age. In the future, these age groups will still be provided for by two parallel types of school: the upper grade of the compulsory school, now termed the *Hauptschule*, and the lower grade of the various types of secondary school, which have been preserved with their old names and with their old eight-class organisation. But both these two types are now four-year schools, whereas the old *Bürgerschule* was only a three-year school; and both are organised as completely parallel institutions. They have the same curriculum and, therefore, every child who has successfully passed out of the *Hauptschule* can enter the next highest class of the secondary school without passing any special examination, exactly as if he had attended that school from the beginning. The result is that selection for secondary studies is, in practice, deferred until the age when the child ceases to be under statutory obligation to attend school, and this was the main purpose of the scheme for the *Einheitsschule*. Further, under the Secondary School Act, the lower grades of all types of secondary school were constructed on uniform lines, following very closely the plan of the reformers. Thus, not only has access to secondary education been secured to the pupils of the elementary schools, but the way has been prepared for a further development of the school system in the direction of the complete " common school " up to the fourteenth year of age. It remains so to organise both types of school, intermediate and secondary, that they shall be fully able to perform their new functions, and it must be admitted that, in recent years, the financial position of Austria has seriously hindered this development.

III. The Present Educational System

1. *Administration and Inspection of Schools*

The Republic is a federal State composed of nine federal provinces of very unequal size. Vienna, as the capital city, enjoys the privileges of a province, and its population is nearly one-third of the total population of the country.

The main legislative enactments—the Elementary Education Act of May 14th, 1869, and the Intermediate and Secondary Education Acts of August 2nd, 1927—have the force of constitutional laws, and can therefore only be amended by a two-thirds majority of the Federal Parliament.

The public compulsory schools are maintained by the provinces and their subordinate local authorities; the secondary schools generally by the Federal Government. All public schools are non-denominational. The private schools play a relatively small part in the field of compulsory education, only 4·7 per cent. of the children being in attendance at private elementary and intermediate schools, which are, for the most part, maintained by religious corporations. In secondary education, private enterprise plays a larger part, for the reason that the former governments of Austria had almost wholly neglected the higher education of girls, while the republic has been prevented by the state of its finances from supplying this deficiency. The secondary schools for girls are thus, for the most part, maintained by private bodies, associations or religious orders, though a few are maintained by municipalities. In recent years, however, the central government has given them much assistance, both by grants in aid and by seconding teachers for service in them. The same relations between the central government and private enterprise prevail in the sphere of technical education. The universities and other institutions of university standing (*Hochschulen*) are all State institutions.

For the compulsory schools, the secondary schools and most of the schools of university standing, the supreme administrative authority is the Federal Ministry of Education. It is only certain technical schools, commercial, trade and agricultural, which fall under the authority of the corresponding technical departments of the government.

The Minister of Education, however, does not carry out the duties of school inspection directly, but through the medium of democratically constituted Provincial Education Councils, and in Vienna through the City Education Council. These are corporate bodies in which elected representatives of the people, nominated by proportional representation from the legislatures, sit and vote with the administrative officials and the federally appointed inspectors of schools. The City Education Council for Vienna, for instance, with its 108 members, is a miniature school parliament. The President is chosen by the Council. In the discharge of his duties, he is bound both by the decisions of the Council and by

the instructions of the Minister of Education, but he has the right to sue in the administrative courts for the abrogation of ministerial instructions which he regards as contrary to the law. The Provincial Education Councils have control over all schools in their administrative area, except schools of university standing which are immediately under the Ministry. They also have control over the democratically constituted local education authorities, the District and Local School Councils, which are, however, only concerned with the administration of the compulsory schools.

2. *The Compulsory Schools, Elementary and Intermediate*

The elementary school in all parts of Austria embraces the eight age groups 7 to 14, the four upper age groups being organised as an intermediate school wherever the number of children is sufficient. Both the elementary and intermediate schools are completely free. In Vienna, the municipality also supplies school books and all teaching material free of charge, irrespective of the means of the parents. Generally speaking, the sexes are separated in the elementary schools, co-education being in force only where necessitated by economic considerations. In the elementary school each teacher is in charge of one class, but the system of specialist teachers has been introduced into the intermediate, as into the other secondary schools.

In the school year 1931–2, there were 4,447 public and 223 private elementary schools in Austria, and 525 public and 103 private intermediate schools. 1,167 of the public elementary schools were single-class schools, 1,146 had two classes, 675 three classes, all the remainder being four-class schools. As already stated, only 4 per cent. of the children of compulsory school age attended private schools (40,809 out of 862,513).

The language of instruction is German, but, under the Peace of St. Germain, the minority nationalities have the right to receive elementary instruction in their mother tongue. In the last school year, the language of instruction in eleven schools was Czech, in twenty-five Croat, in seventy-six Slovene and German, and in five Magyar. 14,219 children, or 1·6 per cent., were in attendance at these schools.

There were 15,440 teachers in the public elementary and intermediate schools, of which 8,737 were men and 6,793 women.

There are a number of *Hilfsschule.i* for mentally retarded children (37 in all, with 200 classes and 1,450 pupils). There are also special institutions for blind, and deaf-and-dumb children. In Vienna, separate provision is also made for physically delicate children, with special classes for children with defects of eyesight, hearing or speech, and for crippled children, where methods of instruction are adapted to the physical defects of the pupils.

The average number of pupils per class in all the Austrian elementary schools is 43·8, but in Vienna the average is only 32·8,

and a reduction in the size of classes is recognised to be a pre-requisite of educational reform.

The Curriculum

The principles of the elementary curriculum have already been explained. The curriculum is uniform in the three lowest classes, the transition to teaching based on a variety of central subjects taking place gradually in the fourth year. The principle of "learning by activity" pervades all teaching, and the teaching of handicrafts is carried on as a special subject.

The intermediate schools are "four-class" schools, but are organised throughout, where the number of pupils permits, in two parallel lines of four classes each, for the more and less able students respectively. Both lines follow the same general course, so that transfer from one to the other is possible as the student's development quickens or slows down. The object of this arrangement is to adapt teaching methods and the rate of advance to the capacities of the minority of less able students, while preparing the more able for that entry into the secondary school which is guaranteed by law to all qualified graduates of the intermediate school. In every intermediate school at least one foreign language, either a modern language or Latin, may be taken as an optional subject. Of the 525 public intermediate schools, 175 provide for English, 279 for French, 38 for Italian and 64 for Latin. Students taking a foreign language and reaching a satisfactory standard in other subjects can enter the next highest class of a secondary school without passing a special examination; that is to say, after completing the four classes of the intermediate school, they pass into the fifth class of the secondary school, which is the first class of the upper secondary school. In Vienna, between three and four hundred children pass in this way to the secondary school each year, and their standard of attainment is in no way inferior to that of children who have attended the secondary school from the beginning.

School books are based on the principle of "learning by doing." The books supplied free of charge by the city of Vienna furnish a particularly good example of this. There the traditional "reader," a jerry-built anthology of very miscellaneous materials, has been altogether done away with and, in its place, children are provided during their eight years of attendance, beginning from the first year, with about a hundred books whose attractive style and "get-up" is calculated to awaken the taste for good literature and to wage effective war against "dirt and trash."

3. *The Secondary Schools*

All secondary schools are "eight-class" schools, divided into a four-year lower grade and a four-year upper grade. Access to the first class is gained through an entrance examination taken at the end of the fourth class of the elementary school; at later ages

candidates enter from the intermediate school without examination. The entrance examination is confined to German and mathematics and is designed to test the stage of mental development rather than the availability of a particular body of knowledge.

The curricula of the three types of secondary school—*Gymnasium*, *Realgymnasium* and *Realschule*—are identical in the first class, and are differentiated from the second to the fourth only in respect of foreign languages. The *Gymnasium* takes Latin from the second and Greek from the fourth class; the *Realschule* one modern language from the first and a second from the fifth class (French and English); the *Realgymnasium* takes Latin in combination with a modern language—in Form A Latin as the first language, with English or French as the second, and *vice versa* in Forms B and C. These Forms B and C differ from each other only in the fact that formal geometry is taught in Form B, while Form C lays greater stress on humanistic studies; Form C is, moreover, specially designed for girls. There are also special higher schools for girls (*Frauenoberschulen*), making provision for instruction in housecraft and child nurture, but these have not yet won an important place in the educational system.

In addition to these distinctive subjects of instruction, all Austrian secondary schools teach religion, German, history, geography, natural history, physics, chemistry, mathematics, drawing, handicraft, singing, physical training and, in the higher classes, the introductory elements of philosophy.

The Secondary Education Act of 1927 introduced two experimental types of school: a five-year *Aufbauschule* for pupils leaving the less highly organised rural elementary schools, and a secondary school for workers (*Arbeitermittelschule*) consisting of evening classes for adults who are already earning their livelihood.

The Leaving Examination

The conclusion of the secondary-school course is marked by an examination, the *Reifeprüfung*. This examination consists of four written subjects (*Klausurarbeiten*) and an oral test in three optional subjects which must, however, include at least one humanistic and one "realistic" subject. As the reform movement developed, a more substantial independent piece of work, called a "home-work," on a theme chosen by the student was introduced as an integral part of the examination, with a view to test the student's capacity for scientific studies. Though this experiment had satisfactory results, it encountered opposition among conservatively minded teachers, and in 1930 it ceased to be compulsory. The main aim of the reformers was to restrict the formal examination within the narrowest possible limits, and to replace it by a practical testing of the student during the whole of his last school year; but for the present this attempt has had to be abandoned.

All types of secondary school are, theoretically, of equal status

in qualifying students for all institutions of university standing (*Hochschulen*), but this theoretical equality of status is not fully realised in practice; for instance, while graduates from the *Realschulen*, which do not teach Latin, are given access to the departments of mathematics and natural science in the university Faculties of Philosophy, they must pass a supplementary examination in Latin if they desire to follow other branches of study, including medicine. The aim of the reformers has been gradually to get rid of the remnants of the privileged position which Latin has traditionally acquired. Both Latin and Greek are required for the study of theology.

It is possible to obtain the secondary school leaving certificate (*Reifezeugnis*) by entering for the appropriate examination of a secondary school as an external student, but the requirements for such an examination are specially exacting.

Private schools are subject to the same general regulations as public schools. They are supervised by the State inspectors and are accorded " public status "—i.e. the right to grant valid certificates—only if they fully satisfy the inspectors' requirements.

Secondary Statistics

The total number of secondary schools in Austria in the school year 1931–2 was 161, attended by 40,987 boys and 19,387 girls. 94 of these schools were maintained by the State, either by the Federal or Provincial Governments or by municipalities, 31 by associations and 36 by religious corporations. For the reasons already given, private schools predominate, especially in the region of girls' education. Of the girls, more than half were in attendance at private schools, while the remainder were attending State secondary schools for boys. In the State schools the tendency is to segregate them in girls' classes, co-educational classes being established only where the number of girls is insufficient for separate teaching.

The distribution of pupils among the various types of secondary schools was as follows: of the boys 37·2 per cent. attended the *Realgymnasium*, 32·8 per cent. the humanistic *Gymnasium* and 30 per cent. the *Realschule*. Attendance at the *Realgymnasium* is growing. This type also dominates the education of girls, 77·3 per cent. of whom attended the *Realgymnasium*, 10·2 per cent. the *Realschule*, 7·7 per cent. the humanistic *Gymnasium* and 4·8 per cent. the higher school for girls (*Frauenoberschule*).

Fees

Fees are charged in secondary schools, in contradistinction to the elementary and intermediate schools, but the fees are low in comparison with other countries, generally 56 *schilling* for the half-year.[1] Graduated remissions of fees down to complete exemption

[1] Par of Exchange 34·59 *schilling* to the £.

are granted according to the means of the parents, the number and amount of these remissions being limited only by the degree of the student's need.

The Federal Boarding Schools

In addition, there are three special federal institutions for boys and two for girls which are designed to serve the needs of specially gifted students of small means. These were created in 1919 by the conversion of the schools for military cadets which had become superfluous. The significance of these institutions is the greater since, unlike England and France, Austria used to have practically no boarding schools. They have played an important part in the reform of secondary education, as a field for planning and experiment. They provide at present for 1,190 boys and 593 girls.

4. *Institutions of University Standing* (*Hochschulen*)

There are three universities in Austria, at Vienna, Graz and Innsbruck ; two technical high schools at Vienna and Graz ; a veterinary high school, an agricultural high school and a high school of world commerce, all at Vienna ; and a high school of mining engineering at Leoben. In addition, there is an independent faculty of Catholic theology at Salzburg.

Universities are organised in four faculties : law and political jurisprudence, medicine, philosophy and Catholic theology. The university of Vienna has, in addition, a faculty of evangelical theology. The faculties of philosophy embrace all departments of knowledge, the humanities as well as natural science. Universities confer a doctor's degree, distinguished by faculties, after a four- or five-year course of studies, concluded by the final examination (*Rigorosen*). The technological high schools award the title of " engineer " or " veterinary surgeon," or the diploma of commerce, after successful completion of the normal course of studies, but a doctor's degree can only be obtained at these institutions on proof of scientific attainments and by the passing of a special examination. The *Hochschulen* were originally open only to male students, but women were first admitted to the faculty of philosophy at the beginning of the century, and later to the faculty of medicine. Since the revolution of 1919, access to all high schools has been open to women.

In the winter term 1931–2, the number enrolled in the high schools was :

Universities : Vienna 12,316, Graz 2,561, Innsbruck 2,722. Technical high schools : Vienna 3,412, Graz 805. Veterinary high schools 343 ; agricultural high schools 468 ; high schools for world commerce 1,695.

5. *The Technical Schools* (*Fachschulen*)

Technical education is not so coherently organised as general education, but three types can be distinguished : higher, lower and special schools. The two first start from the end of the period

of compulsory attendance, at 15 years of age, and train for particular trades or professions; the special schools are designed for older students who have completed their professional training and desire to increase their knowledge or to specialise in a particular branch.

The most important of the higher schools are the great "federal institutions of technical and trade education." They are usually four-year schools, recruited by entrance examination on completion of the intermediate or lower secondary course. Their standard is not much inferior to that of the upper secondary school and, like the latter, the end of their course is normally marked by a leaving examination. Their leaving certificates are not, indeed, generally valid for admission to a *Hochschule* itself, but, subject to certain conditions, holders of these certificates can enter the department of the technical high school corresponding to the character of the certifying school. There are schools of mechanical engineering, electro-technology, agriculture, mining, industrial chemistry, textiles, etc., as well as a special federal higher institution of agriculture; the school of industrial art at Vienna occupies a special position. The certificates of the four-year higher schools of commerce, called "academies of commerce," admit to the High School of World Commerce, and, subject to certain supplementary examinations, notably in Latin, are recognised also for admission to the university faculty of jurisprudence.

The lower technical schools are mostly one-year or two-year schools. They represent all branches of trade, industry and commerce, often reflecting the local needs of particular neighbourhoods. There are, for instance, schools of clockmaking, woodcarving, etc., and schools for different branches of agriculture, such as viticulture, fruit farming, horticulture, bee-keeping and dairy farming. To this group belong too the schools for women's trades such as dress-making, embroidery and hat-making as well as for housecraft, hotel-keeping, etc.

The special schools, mostly one-year or two-year schools—those for agriculture being limited to the winter months—are also highly specialised. Some of them are attached to higher technical schools, their function being to educate trained workmen for posts as foremen, works managers and the like.[1]

6. *Continuation Schools* (*Fortbildungsschulen*)

The industrial and commercial continuation schools are designed to supplement by a regular school course the training given by private employers to their apprentices. They are regulated, not by any federal law, but by provincial legislation, and their organisation consequently varies from province to province. Attendance is, however, compulsory in all provinces, in Vienna and the other large cities for three years, and elsewhere usually for two years. Formerly

[1] For a full survey of all technical institutions see Dr. Emmerich Maros: *Die Mittleren Unterrichtsanstalten und Fachschulen für die Berufsausbildung in Osterreich*, Vienna, 1930.

the classes were held in the evening and on Sunday, but under the republic most provinces have required one working day a week to be reserved for attendance at the continuation school, the use of Sunday for this purpose being still allowed only in some of the smaller provinces. The schools are maintained by contributions from provinces and municipalities and from commercial and industrial associations, who are represented on the governing bodies of the schools.

Where the number of apprentices is sufficient, the schools are specialised by trades—for instance, there are 106 schools in Vienna—otherwise they take the form of " general trade " schools or classes. Workshops are provided in connection with the technical courses, with the object of giving apprentices an insight into modern industrial methods outside the narrow scope of their daily work. So far as shortness of time permits, an attempt is made to continue the civic and general education of the students. In this sphere the arrangements in force in Vienna are particularly worthy of study, including the very successful experiments made in the direction of school self-government. Since the introduction of the so-called " school communities " (*Schulgemeinden*), discipline in these schools, which had proved difficult to maintain, has become exemplary, and the representative bodies of students have exerted a good influence also in the fields of literature, art and sport.

The defect of the continuation schools is that, though they represent a necessary supplement to any course of education terminating at 14, they have hitherto been confined to apprentices. Some provinces have begun to introduce continuation schools for agricultural workers, but the ideal of extending continuation education so as to embrace all juvenile workers, including those employed as unskilled workers at factories or in work at home, remains to be realised.

7. *Training of Teachers*

Elementary teachers are trained in the Normal Schools for men and women teachers. Originally four-year schools, entered at the age of 15, they were later supplemented by one-year preparatory classes designed to cover the period between the end of compulsory school attendance and the prescribed minimum age. Since 1932 these preparatory classes have been absorbed into the schools themselves, so that the school course has become one of five years. The course combines general education with professional training, the training being both theoretical and practical. For practical training, the schools have their own affiliated elementary schools, called " practice schools " (*Übungsschulen*). The course ends with a leaving examination which entitles successful candidates to provisional appointment. The examination for the teacher's certificate, necessary for substantive appointment, can only be taken after two years' probationary service.

The Normal Schools are maintained by the State, but there are

private schools, established by religious corporations, which outnumber the State schools—five out of fifteen for men, but fifteen out of twenty-one for women, being in private hands. The private schools are strongly defended by the conservatives, with the result that any fundamental reorganisation of the training of teachers has hitherto proved impossible. In 1931–2 the men's and women's schools contained approximately 5,000 students.

Teachers in the intermediate schools (*Hauptschulen*) are usually drawn from the ranks of teachers in elementary schools, but such teachers have to pass a special examination in two or three subjects, the so-called "teachers' certificate examination for intermediate schools." Candidates prepare for this examination, not at any institution, but by private study, supplemented, however, by special continuation courses provided by the education authorities. In university cities, the same purpose is served by the lectures of the faculty of philosophy, which teachers can attend as "special" students. Holders of a doctor's degree in philosophy can enter for the certificate examination without having taught in an elementary school.

Teachers in secondary schools must have completed at least four years of study in a university faculty of philosophy (teachers of geometry partly also at a technical high school, teachers of drawing at the Academy of Fine Arts). Such a course of study is concluded by the "examination for the teaching service" (*Lehramtsprüfung*) in any two optional subjects, gymnastics being recognised as a subject. The university course is, in substance, a purely theoretical one, though lectures and practice in pedagogy and teaching method for the various subjects are also prescribed. Practical training is taken after the examination during a probationary year of service at a secondary school. Where the number of probationers is sufficient, they are brought together during this year in "seminars," in which questions of teaching and education are examined by lecture and discussion. Final appointment to the secondary teaching service is deferred until this probationary year has been successfully completed.

Projected Reforms in the Training of Teachers

The reformers have strongly criticised this system of training, which has remained substantially unaltered since the middle of the nineteenth century. They have urged that Normal Schools which attempt to carry on general education and professional training at the same time can succeed in neither, even at the cost of seriously overstraining their students. Their general education falls short of the ordinary secondary school standard, with the result that their graduates cannot gain admittance to institutions of university standing; yet, on the other hand, their training in pedagogics and psychology is too slight to meet the demands of the reformed system of elementary education. *Per contra*, the training of secondary

teachers, satisfactory enough on the theoretical side, is utterly defective so far as pedagogy is concerned, with the lamentable result that many secondary teachers regard themselves as specialist scholars rather than as teachers. What is required is, therefore, more knowledge in the elementary teacher and more teaching skill in the secondary teacher. Under the scheme of the Reforms Department all teachers, without distinction, were to be required to obtain the leaving certificate of a secondary school, and, having thus completed their general education, they were to receive their professional training at the university—elementary teachers in a two-year and intermediate and secondary teachers in a four-year course of study. The teaching of pedagogy was to be improved by linking the faculties of philosophy with correspondingly organised " institutes of pedagogy." This scheme has not yet been carried out, owing partly to the opposition of the Church, which is reluctant to lose hold altogether on the training of teachers, and partly, in recent years, to the state of the public finances.

In Vienna, however, a significant step has been taken. The municipality, going beyond its statutory obligations, has introduced and successfully carried out a new system for the training of elementary teachers, by establishing at its " institute of pedagogy " two-year " high-school courses," admission to which is reserved to graduates of a secondary or Normal School. These courses are, however, at present in abeyance, in view of the fact that, owing to the decline in the birth-rate, there is no demand for new elementary teachers. The extension of the Normal School course to five years, already mentioned, represents in itself a step in advance, since it brings the general education of these schools so far into harmony with the curriculum of the upper secondary school that their graduates can gain access to the university by passing a supplementary examination in a foreign language. Nevertheless, a reform in the training of teachers is still a pressing problem, which will remain in the forefront of discussion during the next few years.

H. FISCHL.

CHAPTER TWO

EDUCATION IN SPAIN

I. General Historical Survey

Early Origins

OWING to its Ibero-Celtic origin and its early relations with the East—Tartessus was the most ancient city of the West —Spanish culture is an amalgam of Latin and Arab elements.

In the early days of the Roman Empire, Seneca, Quintilian and Martial were Spaniards and the country had already its higher schools. In the fourth century Priscillian was the originator of one of the chief Western heresies, with gnostic tendencies in education. Between the sixth and seventh centuries St. Isidore of Seville wrote his *Etymologies*, and his disciples carried on his work.

The Caliphate of Cordoba and the Middle Ages

But Spanish leadership in Western culture was never more marked than during the Caliphate of Cordoba, from the eighth to the eleventh centuries. It brought Europe into contact for the first time with the Greek classics through Arabic translations ; modern scholars have found in its conceptions of religious mysticism some of the sources of Dante's inspiration : in its great schools, the *Madrisas*, may be discerned the birthplace of the universities. Moreover, the caliphs founded schools for the poor, even in the smallest villages, and the majority of Spanish Arabs could read and write. A treatise on educational method, the *Fountain of Life*, was written in the eleventh century by Ibn-Gevirol, the Hispano-Jewish philosopher.

This culture continued to flourish during the twelfth, thirteenth and fourteenth centuries in the great Arab and Jewish centres at Toledo and other cities, and its influence may be traced in the works which bear the name of Alfonso the Wise of Castile (thirteenth century), who dedicated to the nascent universities the chapter in his *Partidas* " on places of study where knowledge is acquired both by teachers and scholars." In another chapter he treats of " the method of training and educating the sons of kings," the forerunner of many later treatises on the education of princes. The beginning of the fourteenth century is marked by the great figure of Raimundo Lulio and his *Libro de Doctrina Pueril*. The kings began to protect schools and teachers by the grant of privileges, in particular the Pragmatic Decree of Henry II (1370), confirmed by Ferdinand and Isabella (1500), by Charles V (1540) and by Philip III (1610).

From the Renaissance to the French Revolution

The renaissance of humanism in the fifteenth and sixteenth centuries was reflected in the rise of the universities of Salamanca and Alcalá and in Cardinal Cisnero's great undertaking of the *Polyglot Bible* at the latter university, in Nebrija's fundamental reform of the teaching of Latin and Spanish, in Luis Vives' educational writings, in Huarte de San Juan's very original *Examen de Ingenios* (1575), in the anticipation by the Benedictine Ponce de Léon (1520-1584) of the oral method in the teaching of deaf-mutes, and in J. P. Bonet's epoch-making book on the same subject (1620).

During this period, the most powerful influence exercised by Spain on the future development of education, whether favourable or adverse, was that of Ignatius de Loyola and the Company of Jesus. Jesuit houses, schools and colleges were founded in great numbers and exerted the same influence on the governing classes as in other countries; they promoted the study of the humanities; their teaching in the minor faculties and in the faculty of philosophy rivalled that of the universities; they numbered among their teachers distinguished scholars in theology, history and literature, such as Ribadeneyra, Mariana and Gracián—and yet they did not avail to stem the tide of decadence.

In the eighteenth century French influence was dominant, but against this influence a minority began to voice the ideas of the time and to interest themselves in primary schools and in popular education. The *Society of Friends of the Country* encouraged education of this kind and the movement of ideas can be traced in the works of Fr. Feijoo, in the manuscripts of Fr. Sarmiento with their veiled reflections of Rousseau, in the writings of the Jesuits Isla and Hervás, in the *Treatise on the Promotion of Popular Industries* (1774) and *Popular Education for Artisans* by Campomanes, in the memoranda and works of Jovellanos, and above all in the progressive and reforming spirit of Cabarrús' *Letters* (1790). From this period date the fruitless attempts to reform the ancient universities; and a sign of the times, though a superficial one connected with the Court, was the creation in 1806 of the Pestalozzian Military Institute. It survived for only two years, and all hope of reform collapsed with the French invasion in 1808 and the war against Napoleon.

The Constitution of 1812

The interrupted work was taken up again in the constitution of 1812 issued by the Cortes of Cadiz. Article 9 of that constitution dealt with education and laid down a basis for its official organisation. It created the Directorate-General of Education and established a Council to control it. These steps were taken largely under the inspiration of the poet Quintana, whose *Memorandum* of 1813 formed the basis of the whole reform. This document was inspired in its turn by Condorcet's Report to the French Legislative Assembly

(1792), from which Quintana translated literally many of his arguments, though he was careful not to indicate their source, nor even to mention the author's name. There is nothing more significant of that era than this silent plagiarism, though another example of the same enforced prudence had been offered in previous centuries by the minority of Spanish sympathisers with Erasmus and the Reformation. Under the scheme of 1812, the curriculum was to be uniform in all institutions and, in all, the political constitution of the monarchy was to be a subject of instruction.

Reform and Reaction : 1814–1875

Modern Spain dates from the Cortes of Cadiz. The absolutist reaction of 1814 obliterated its projects, but the Directorate-General of Education was re-established after the return of the Liberals and the restoration of the constitution in 1820. A scheme of public education was then issued, under which schools were to be provided in all centres of population with more than one hundred inhabitants. The new and more violent reaction of 1823 brought this scheme to naught, but the ideas of the reformers continued to gather strength. From time to time political panic closed the universities, but the necessity of organising schools began to make itself felt, and the first law of primary education was promulgated in 1825, the *Scheme of Schools and General Regulation of Primary Education.*

With the death of Ferdinand VII in 1833, the restoration of constitutional government and the return of the Liberal exiles, there opened a period of greater continuity in educational reform. New and more adequate regulations were issued ; a system of inspection was instituted ; infants' schools, schools for the training of teachers and secondary schools were founded, as well as a University Normal School, a modest imitation of the Ecole Normale Supérieure of France, which, however, had only a short life. The lead in almost the whole of this movement was taken by the then Director of Education, Gil y Zararte, author of the first *History of Public Education in Spain* and chiefly responsible for the Act of 1857, which takes its name from the Minister Mayano. This was the first comprehensive Act, embracing all grades of education, and it is still in force to-day, though in practice most of its provisions have been superseded. A bureaucratic codification of the existing system, rather than an educational reform, this statute, with its Regulations of 1859, represented neither a reactionary nor a liberal policy, but simply the doctrinaire principles and the regalist politics of the Moderate Party, under whose auspices it saw the light.

The reaction of the last years of the reign of Isabella II (1866–8) directed legislation into an ultra-moderate path. In particular, the Government went so far as to persecute a group of professors of the University of Madrid, whose teaching was condemned as " pernicious "—that is to say, anti-Catholic. They belonged to the

school of Sanz del Rio, a professor of philosophy who had been educated in Germany under the influence of Krause ; whence they were popularly known as *krausistas*. Power of teaching, acuteness of thought and austerity of life made Sanz del Rio the chief intellectual force in nineteenth-century Spain. Apart from his influence it would be impossible to account for the internal growth of the educational movement in Spain up to the present day. Together with some of his followers, he was expelled from his chair. Among these followers were Salmeron, the future President of the first Republic of 1873, and Francisco Giner, the typical teacher and educator.

The Revolution of 1868 reinstated these leaders in the University. The reforms of that régime were based on liberal principles : free expression of opinion by the teacher, freedom of conscience and the right of all citizens to teach privately.[1] In addition, the Constitution of 1869 affirmed the principle of religious liberty. The ephemeral republic of 1873 projected great reforms, especially in university studies, which were vehemently discussed by the professors but had no time to take root.

The Bourbon Restoration. 1875–84 : *the Free College*

Immediately on the restoration of the Bourbon monarchy in 1875, liberty in teaching was once more suppressed. Several well-known professors resigned their chairs ; others, among them Giner, protested energetically, appealing to the constitution which was still in force, but were again dismissed. On this, Giner conceived the idea of the Free College (*Institución Libre de Enseñanza*), which he founded in 1876. This was a private enterprise, wholly supported by voluntary subscription, with no official connections or subvention, and, in the words of its articles of association, it was—

> " completely dissociated from the principles or interests of any religious communion, philosophical school or political party ; and dedicated solely to asserting the freedom and inviolability of knowledge, and the consequent right of every teacher, as alone responsible for the doctrines he propounds, to the independent pursuit and transmission of knowledge, without interference by any authority except his own conscience."

The Free University, which should have emerged from this enterprise, never materialised. Enthusiasm for it was lacking in the country, and even among many of its promoters, and lack of enthusiasm meant lack of material resources. The country was not ready for a university competing with the State universities but without the power to confer degrees. Giner's Free College was therefore converted into a school of general education, but its founder, more convinced than ever of his mission, continued to be

[1] It will be convenient in the remainder of this chapter to use the phrase " freedom *in* teaching " for the first of these principles and " freedom *of* teaching " for the third.

its life and soul and the centre of an important group of followers. Ever since, the College has been recognised both by friend and foe as the chief educational force in Spain. It has owed its power, not only to the students it has trained, but also to the general example set by its teaching and to its founder's personal prestige.

Up to that time and especially in the nineteenth century, education had been generally neglected or ignored by political parties. Only rarely did it attract the notice of Parliament, and even more rarely did members of Parliament show themselves capable of dealing with it. Hence the absence of any informed public opinion on a number of educational problems which, in other countries, had at least been posed, if not solved. In these circumstances, any general scheme of legislation could only have been tentative and ephemeral, and therefore less effective than more partial reforms. It was such partial reforms, limited to certain concrete objects, that the Free College advocated as the only possible ones for the moment. Even these, it believed, must be preceded by the preparation of public opinion and by a careful consideration of all the elements necessary to their success, especially the element of trained personnel.

The ideas thus ventilated by the Free College exerted some influence on public opinion. The principles and methods which it advocated were hotly discussed by the first National Congress of Education in 1882. The Liberal Party, on its return to power in 1881, began by restoring Giner and all other dismissed professors to their chairs and affirmed the principle of freedom in teaching. It instituted certain reforms in the training of teachers and in primary education; it created the Bureau of Educational Research (*Museo Pedagógico*), which has done much since then to make known officially in Spain the progress of education in other countries and to keep teachers abreast of these developments; and finally it outdistanced most other countries by giving statutory recognition in 1883 to the principle of equal salaries for men and women teachers.

1884–98

Political reaction followed in 1884. The Conservative Government of that year undid or disturbed many of the reforms already achieved; and, though the Liberal Government of 1886 restored them in part, adding new legislation in 1887 in regard to holidays and pensions for primary teachers and transferring the teachers' training schools and the inspectorate from the control of the provinces to that of the State, the Liberal Party itself in 1889 went back on the reforms of 1886. Such a *volte-face* can only be accounted for by the fact already mentioned, that the different political parties were not identified by public opinion with any particular educational ideas. Moreover, in the absence of any permanent officials with sufficient experience, educational policy depended for the most part purely on the personal opinion of

ministers who, coming unprepared to power, lost power before they had time to learn their business.

It was, in fact, at this moment that the struggle between the radical ideas of progressive educational reform, represented by the Free College, and the opposing ideas advocated by the conservative or ultramontane group known at that time as the Catholic Union, began to influence the official policy of the Government. Among the governing parties it was this conservative group which interested itself specially in educational problems. In following this struggle, which is the key to the educational history of the period, and in tracing through the continual chops and changes, the actions and reactions, of these years the laborious but steady advance of progressive ideas, it must be borne in mind that the ultramontane group was essentially a political and governmental party immersed in public affairs, whereas the Free College had deliberately renounced, not only party politics, but all direct participation in political action, and could therefore exercise no influence save on educational opinion, nor summon any force to its aid save the mere force of ideas. It was through this interplay and conflict of forces, and through successive advances and retreats, that the reform movement had to work itself out, gathering strength in all branches and grades of education and bringing educational problems more and more to the attention of the press and Parliament, but still only slowly and imperfectly.

The Beginnings of Reform : 1898–1930

The national crisis of 1898 stirred public opinion, and every agitator of that time insisted on the need for educational reform. The most original of these agitators, Costa, with his popular slogan of " school and larder," adopted in his campaigns the programme of the Free College. Its main items were a great development of primary education in all its aspects and increased provision of primary schools on the most ambitious scale ; freedom of conscience for pupil and teacher in all schools ; promotion of scientific research at the universities ; reform of the standards of secondary education ; such training of teachers of all grades as would make them conscious partners in a great international movement ; and the determination so to handle the whole scheme of reform as to make it a means of national pacification, setting it above the alternations and the passions of party politics, and using it to moderate and reconcile these contending forces.

Though hesitatingly and slowly, public opinion was increasingly won over to these views, and successive Governments took action in the directions indicated. The Ministry of Public Instruction and Fine Arts was created in 1900 ; in 1902 the State took over responsibility for the salaries of primary teachers and for the maintenance of the schools, which had been neglected by many local authorities ; in 1904 the Conservative Government established the chair of Education at the University of Madrid ; and in 1907 the Liberal

Ministry succeeded, among other reforms, in establishing two councils with some independence of status, composed of men of different opinions distinguished in the professions and in politics. These were the *Council for the Promotion of National Education*, to supervise primary education, the training of teachers and the inspectorate, and the *Council for the Extension of Scientific Study and Research*, to promote these objects and to grant scholarships for study at home and abroad. The first Council was suppressed by the Conservative Party before it had got to work, and in its place a School of Higher Education for Teachers was established in 1909. In spite of the vicissitudes which this school has undergone and the obstacles it has had to surmount, the best of the new inspectors of primary schools and of the new teaching staff in the training schools for teachers are now being drawn from among its students.

The other Council, presided over by the distinguished Prof. Cajal, was also within an ace of extinction, but it was able to save itself and has remained at active work, though compelled constantly to struggle for existence, not only against the enmity of reactionary politicians, but also against the hostility of certain conservative university circles, who suspected it of desiring to invade or supersede the peculiar functions of the universities. This Council's survival is important, because from it has proceeded in the last twenty years the reforms and new institutions which bear most evidently the mark of general culture : the creation of new centres of higher and secondary education and the effective reform of old ones ; the granting of scholarships to professors and students for study abroad ; significant experiments in educational methods ; the foundation of hostels for male and female students ; the organisation of courses and lectures, and a number of important publications.

The Republic

Side by side, however, with these reforms, primary and popular education languished. It is not strange, therefore, that the Republic, in the two years of its existence, has had to engage in both extensive and intensive work in this region. Only the most important features of this work can be indicated here. The creation of 9,620 classes with 481,000 pupils ; an increase in the salaries of 31,755 teachers, or 86·5 per cent. of the total ; provision of buildings for 1,650 new classes ; the reform of the teachers' training schools and of the professional inspectorate ; the appointment of 175 new inspectors and of a central inspectorate controlling the district inspectors and the teachers' training schools ; the appointment of 6,000 new national teachers ; the mobilisation of 22,000 teachers, principally in rural areas, to take special courses to complete their training ; the establishment of the educational missions (*Misiones Pedagógicas*) for the purpose of spreading ideas of culture and sound recreation in the more remote villages ; the establishment of schools abroad ; the reorganisation of post-school activities

and the remarkable increase of grants for their support; and, as the culmination of all this policy, the floating of a loan of 400 million pesetas exclusively earmarked for the construction of primary school buildings.

Moreover, the Republic has done effective work in other spheres. In the sphere of secondary education, it has increased the number of grant-aided institutes and colleges by 52; it has laid plans for the establishment of 75 more in order to replace, as required by law, the schools of the religious orders who have been forbidden to teach; and it has established an inspectorate for this branch of education where none had existed.

In higher education, the Republic has reformed the Council of Public Instruction; it has created secretariats of technical education in the Ministry, and a directorate of professional education; it has reformed the curriculum of university faculties, especially those of philosophy and letters; it has suppressed the School of Higher Education for Teachers and has established in its place an Educational Section of the Faculty of Philosophy of the University of Madrid; and it has created two centres of Arabic studies in Madrid and Granada, an Institute of Mediæval Studies, a National Foundation for Scientific Research, and the International Summer University at Santander. Finally, bills have been introduced into Parliament reforming the curriculum of all grades of education. These bills have not yet been discussed, but they will probably be codified in the future general Public Education Act, based on Article 48 of the Constitution of 1931. This article forms a fitting conclusion to this section of our chapter and a fitting introduction to the following section, since it formulates the basic principles to which education is to conform in future.

II. Present Educational System

Article 48 of the Constitution runs as follows:

"The service of education is an essential function of the State and provision shall be made for it by means of educational institutions, interrelated according to the system of the common school (*escuela unificada*).

"Primary education shall be free and compulsory.

"Teachers, professors and occupants of university chairs, belonging to the public service of education, are public officials. Liberty in teaching shall continue to be recognised and guaranteed.

"The Republic shall make laws facilitating access to all grades of education by Spaniards whose economic resources are restricted, to the end that such access shall depend solely upon their ability and vocation.

"Education shall be secular; its method shall be based on the principle of activity,[1] its inspiration shall be the ideals of human solidarity.

"The Churches are accorded the right to teach their respective doctrines in their own establishments, subject to inspection by the State."

[1] *Trabajo*, cf. Chapter One, page 876, where the corresponding word *Arbeit* is translated "learning by activity."

Administration

From the beginning of the nineteenth century, public education has fallen successively under different ministries. In 1847 was created the Ministry of Commerce, Education and Public Works, converted in 1855 into the Ministry of Development (*Fomento*). Education remained under this Ministry until the present *Ministry of Education and Fine Arts* was established in 1900. This department, in the words of the decree establishing it, " concerns itself with matters of public education of all classes and grades, and with the development of science and letters, the fine arts, public records, libraries and museums." Its present organisation consists of the Minister, an Under-Secretary of State and three Directors for Primary Education, Fine Arts and Professional and Technical Education respectively.

Associated with the Ministry is the *National Council of Culture*, created in 1836, which has passed through many transformations. Its present organisation dates from 1932 and consists of a president, a vice-president and an indeterminate number of counsellors nominated at the discretion of the Minister, the Under-Secretary and the three Directors being *ex officio* counsellors. Nominations are for six years, half the membership retiring every three years. The Council is divided into five sections: primary education and labour schools, secondary and intermediate education of the technical and artistic type, higher education, fine arts and popular culture. The Council reports on any matter referred to it by the Minister, but certain matters stand referred to it automatically. It has the right to initiate reforms in matters of curriculum ; the Minister has delegated to it control over the higher inspectorate ; and it collects and collates the terminal reports transmitted to it by all institutions of national education.

The Rectors of the Universities are the official heads of all education in their area, assisted by a Governing Body (*Junta de Gobierno*) and a Public Service Commission (*Consejo de Patronato*). In addition, the Republic has created in each university area a *University Council of Primary Education*, composed of representatives of the university, the secondary and normal schools, the inspectorate and the teachers, nominated by the Directorate General of Primary Education. Its functions are cultural and social, questions of administration and teaching in each province being in the hands of a *Provincial Council of Primary Education*, composed of training-school teachers, inspectors of primary schools, teachers in national schools, parents and administrative officials. Strictly administrative functions are discharged in each province by an *Administrative Section of Primary Education*, directly under the Minister of Education. Finally, there is a *Local Council* in each municipality ; and for certain branches of education, *School Councils* may also be appointed, with functions which are mainly social and protective.

The past growth of the central administration of education, in particular, has suffered from an excess of bureaucracy and a lack of technical knowledge. The recent creation of the technical secretariat and the new regulations and requirements for future entry into the technical and administrative staff of the Ministry are designed to correct these shortcomings.

Framework of the School System

The organisation of public education differs little in its general lines from that of most other countries. Almost all educational functions have their appropriate organisation, but not all are of the same efficiency.

1. *Institutions of General Education :*

(a) *Primary schools* of the various grades ; schools for the training of teachers ; the inspectorate of primary schools ; the Museum of Education ; the educational missions ; short courses for completing the training of teachers ; teachers' conferences ; travelling studentships, both in Spain and abroad ; school colonies, canteens and clothing stores ; the National College of Deaf-Mutes and the National College for the Blind, with provincial colleges of the same types ; the Central School for Defective Children and municipal schools of the same type ; the Jewish School at Tangier ; and the Spanish-Arab Schools at Tangier and Casablanca.

(b) *Secondary Schools :* the national institutes, local institutes and grant-aided colleges ; scholarships, travelling studentships and exchange of groups of students with foreign schools.

(c) *Universities* with the special institutions affiliated to them ; seminaries ; laboratories ; art collections ; institutions in various localities for Portuguese studies and for the study of radio-activity and coal ; courses for foreign professors ; and the International Summer University at Santander. Outside the universities, there are the following centres of higher education : the Cajal Institute ; the National Institute of Physics and Chemistry ; the Institute and National Museum of Natural Science with its courses and research laboratories ; the Botanical Gardens', Centres of historical studies, art, mediæval studies, Arabic and Spanish-American studies, and American history ; the courses and laboratories of the Students' Hostels ; and special courses for foreigners.

2. *Technical and Professional Education :*

(a) *Elementary :* Classes attached to primary schools ; schools of vocational guidance and pre-apprenticeship schools ; elementary labour schools ; schools of art and art industries, in their technical aspect ; classes of elementary and professional education.

(b) *Intermediate :* Higher labour schools for the training of industrial technicians and assistants ; the Centre for the Higher Professional Training of the Artisan, for workmen serving abroad ; schools for the training of fitters, foremen of public works, overseers of mines, and skilled workers in agriculture, chemistry, mechanics and electrical engineering ; the Professional School for Women ; professional schools of commerce ; and the School of Languages.

(c) *Higher :* Schools of higher commercial studies ; veterinary schools ; schools of architecture and industrial engineering ; schools of civil engineering (roads, canals and harbours), mining, agricultural, mountain and naval engineering ; and, as higher centres, the Geological

Institute, the Laboratory of Mines, the Laboratory of Mechanical Engineering, the Psychotechnical Institute and the Institute for Further Technical Education.

3. *Fine Arts :*

(a) Courses attached to primary schools ; schools of art and art industries in their artistic aspect ; and courses of drawing for teachers.

(b) Elementary schools of fine art, and conservatories of music.

(c) Higher schools of fine art, the National School of Fine Art, the National School of Engraving, schools of pottery, the National Conservatory of Music and Elocution, courses and lectures on the history of art in museums, hostels for artists in the country, and art exhibitions and competitions.

4. *Institutions of Higher culture and education,* not being teaching bodies in the strict sense.

Academies, archives, libraries and museums ; the Council for the Extension of Scientific Education and Research, the Council for the Exchange and Acquisition of Books, the Council of Archæological Research, the Council of Historical Portraits, the Council for the Preservation of National Art Treasures, the Council of Music and Lyric Drama ; the university theatre, *La Barraca* ; and the National Foundation for Scientific Research.

5. *Special Schools under Other Ministries :*

(a) *The Ministry of State :* the School of Fine Art in Rome, the Spanish College at Bologna ; preparatory courses for the diplomatic service ; the Council of Cultural Relations, which has established Spanish schools in Andorra, France and Portugal for the benefit of the Spanish colonies in those countries ; a secondary school in Lisbon ; teachers of Spanish in Balkan cities, for the Sephardic Jewish colonies, and in European universities. The Ministry has also founded a Spanish college in the *Cité Universitaire* at Paris which is about to be opened. The so-called *Obra Pia* makes grants to primary schools and a secondary college at Tangier under the direction of the Franciscan Order.

(b) *The Ministry of Justice :* The Institute of Penology which, among other functions, trains the managing staff of prisons.

(c) *The Ministry of Local Government :* The Police School and the School of Sanitation.

(d) *The Ministry of Labour :* the Social School.

(e) *The Ministry of War :* the military schools.

(f) *The Ministry of Marine :* the Naval Academy ; nautical schools for the merchant marine ; the Spanish Institute of Oceanography, with its stations of marine biology.

(g) *The Presidency of the Council of Ministers :* Spanish primary schools, urban and rural, and Spanish-Arab and Spanish-Jewish schools of art and industry in the Protectorate Zone of Morocco, with Spanish, Mohammedan and Jewish teachers ; scholarships for Mohammedan students studying in Spain ; schools in the colonial territory of Guinea.

In addition, the seminaries for the training of the clergy continue their work in the different dioceses without State assistance.

Public versus *Private Schools*

Schools may be classified into (*a*) ***national***, supported by the State, (*b*) ***public***, supported by a municipality, province or autonomous

region, (*c*) *endowed*, maintained by private endowments, and (*d*) *private*, relying on their own resources. Every Spanish citizen is free to teach privately, provided that he possesses the necessary qualifications, as required by the State, and a government licence, issued on certain conditions.

The private school, secular as well as religious, has in the past competed with the State schools in the primary and secondary spheres, but not in the sphere of higher education. The Jesuits and the Augustinians founded the university schools of Deusto, Bilbao, and the Escorial respectively, but neither had much success, as they failed to obtain the right of conducting examinations and conferring degrees. The first institution disappeared on the dissolution of the Order of Jesus, and the second has now disappeared as the result of the Republican Constitution and the Law of Congregations prohibiting teaching by religious orders. On the other hand, the competition of the private schools has been keenly felt in secondary education, owing partly to their practice of separating the social classes, partly to their use of the boarding system and their stricter educational discipline as compared with the national schools, and partly to the parents' desire for religious education. In primary education the competition of private schools—secular in the rural districts and conducted by religious orders in the great centres of population—has been mainly due to the serious shortage of national schools.

The Problem of Primary Education

Primary education has been free and compulsory since the Act of 1857. Free education established itself step by step, but, owing to lack of schools, compulsion could not, and cannot even now, be enforced. The number of schools has been slowly increasing during this century, but the establishment of 9,620 new schools in the last two years exceeds the record of the fifteen previous years. Centres of population which formerly had only one school have provided ten or even fourteen ; one has increased the number of its schools from five to thirty-two, and Madrid, which had 509, has founded 389 new ones, providing for 18,500 of the 45,000 children who, being unable to find accommodation in the national schools, had been obliged to attend private schools or schools conducted by religious orders.

The population of Spain in 1920 was 21,303,162, of whom 42·64 per cent. were illiterate. According to the census of 1930, the population has increased to 23,563,867, but the illiteracy figures have not yet been published. The school population from 3 years of age to 14 may be calculated at about 20 per cent. of the total, or, say, 4,712,773. In order to provide national schools for all these children in classes of fifty each, 90,000 teachers would be required, of whom the State has at present at its disposal only 46,260. It has, therefore, a heavy task before it, if it is to replace the private schools which are the refuge of those who cannot gain

admission to the national schools. The same problem arises, though in less degree, in secondary education.

Statistics

The enrolment in the national primary schools in 1932 was 1,203,162 boys and 1,108,558 girls or a total of 2,311,720. In the national secondary schools, there were in 1931, 64,959 male and 11,115 female students, or a total of 76,074. In the universities, the numbers were 33,471 and 2,246 respectively, or a total of 35,717. In the normal schools for the training of teachers there were 16,878 male and 18,882 female students, or a total of 35,760.

The total State budget for 1933 amounted to 4,727,283,292 pesetas, of which the Ministry of Education accounted for 310,789,204.[1]

Inspection

A permanently organised inspectorate has only existed for primary schools. The universities, the secondary schools and other institutions of higher education have only been inspected in special circumstances. Some attempts were made to appoint permanent general inspectors, but these experiments proved abortive. Recently, there have been created an inspector for labour schools, another for schools of art and art industries, and an expert council of inspection for secondary education, composed of eight inspectors who are secondary teachers nominated by the Minister. There is also an inspector of schools in Morocco.

The inspectorate for primary schools is of long standing, but has undergone many changes. It has always been inadequate, and its outlook has been administrative and bureaucratic rather than educational. There has only been one inspector for each province. The number of inspectors has recently been increased to 312 at the beginning of 1933, and 65 more have been appointed during the year. As an experiment, ten primary-school teachers have been selected to supervise, as inspectors, a group of schools in the neighbourhood of their own. A most important step has been the permanent appointment of five central inspectors of primary education whose duty is to inspect the inspectors and the schools for the training of teachers.

In spite of this recent progress, the inspectorate cannot be regarded as a sufficiently expert educational body. It is too small and, in fact, as a general rule, it cannot visit the schools more than once a year. Inspectors are distributed in proportion to the number of public and private schools in each province. Their salaries range from 5,000 to 15,000 pesetas a year, in addition to allowances. The duties of inspection are carried out equally by persons of both sexes. Appointment to the inspectorate is by competitive examination, candidates being required either to have obtained the teacher's certificate, or to have graduated from the university Faculty of Education, or to have served for five years in a national school. Another mode of entry is by competition between teachers in

[1] Par of Exchange: 25·22 pesetas to the £.

national schools with fifteen years of distinguished service (teacher-inspectors). Inspectors cannot be removed from their posts.

Schools are medically inspected, in Madrid and Barcelona by special officials, and in other centres of population by the medical member of the local Council of Primary Education.

The State has no right of inspection of private schools, except in matters relating to the observance of the law, morals, hygiene, and the collection of statistics.

Training Schools for Teachers

These were created in 1838. There has been one for men and one for women in each province. By the recent reforms of 1931 these two schools in each province have been amalgamated into a single Training School for Primary Teachers which is co-educational both in its student and in its teaching body, and solely devoted to professional training. The *bachillerato*, or secondary school matriculation certificate, is required as a qualification for admission. There is a fixed number of students for each course, never exceeding fifty. The period of professional training is three years, at the conclusion of which the student serves for one probationary year in a primary school. A committee of teachers and inspectors then passes a final judgment on his competence and, if successful, he is registered as a national teacher.

There are fifty-four normal schools, one in the capital of each province, with the exception of Madrid and Barcelona, which have two each—one of those in Barcelona being maintained by the State and the other by the autonomous government of Catalonia. In addition, the cities of Santiago and Melilla each have one school. Some of the schools have hostels attached to them.

In each school there are ten regular teachers : three in pedagogy and philosophy, three in the methodology of literary education, three in science and one responsible for labour studies, domestic economy and handicraft. In addition, each school has three specialist teachers of French, music and drawing, as well as a number of assistant teachers.

The Section of Education in the Faculty of Philosophy and Letters of the University of Madrid, where future teachers of training schools and inspectors of primary education are to receive their education, confers three degrees: the Certificate of Educational Studies, which is required for all teachers in intermediate and higher institutions ; the Diploma of Education ; and the degree of Doctor of Education.

Primary Schools

These may be classified as kindergartens, infant schools, primary schools and adult schools. All bear the name of national schools. Kindergartens date only from 1926, and are very few. Infant schools have existed since 1838, but there are not many of these either, as their establishment was not obligatory upon the munici-

palities. We have already indicated the situation in regard to primary schools properly so called. Adult schools are attached to the primary schools. The rapid development of all these classes of schools is the most important and the most difficult task before the Republic in the sphere of education.

The Primary School curriculum includes Spanish; reading, writing and grammar; arithmetic with the metric system of weights and measures; geography and history; elementary ideas of law, geometry, physical and natural science, hygiene and human physiology; drawing; singing; handicraft; and physical training. The Constitution has abolished denominational teaching. Many of these subjects are not, in fact, taught in the majority of schools, or are taught with slight success for lack of the necessary means. Thus, for instance, the teaching of agriculture has been compulsory since 1849, and in 1905 every municipality was required to establish an agricultural demonstration centre, but this requirement has only been carried out in a few instances. For girls, the curriculum includes also women's crafts and elementary ideas of domestic economy. Where a museum exists pupils are required to visit it frequently.

The age range of infant schools is from 4 to 6, and of the primary schools from 7 to 14. In the smaller towns, the majority of pupils cease attendance at 11 or 12 years of age, and in the country even sooner. In the country attendance increases in the winter and falls off in the spring and summer.

Since 1931, the Local Council has had the duty of regulating the hours of the school sessions. The school is commonly open for three hours in the morning and two in the afternoon, Thursday being a half-holiday. The head teacher is responsible for the time-table and methods of instruction. The great majority of schools, even in the larger towns, are ungraded, with an excessive number of pupils of all ages. Since 1897, the law has required that the practice schools annexed to teachers' training schools shall be graded, but in other schools grading is only resorted to when the ordinary standard of fifty-four pupils per teacher makes it necessary. The grading of schools is, however, being rapidly adopted. In towns with a substantial school enrolment schools are grouped into sections consisting of from six to twenty-four classes. The Act of 1887 laid down that in public schools there should be forty-five days' vacation in each year—from July 18th to August 31st—and the Local Councils have power to increase the length of the vacation in accordance with local conditions.

The local authorities are responsible for the building, adaptation or hiring of school premises, but the State makes grants-in-aid of from 25 per cent. to 50 per cent., according to local needs, and supervises, inspects or itself carries out the work required according to circumstances. The building of schools, as we have already indicated, is the main preoccupation of the present Government; the larger towns, and especially Madrid, have, in the

last three years, contructed a number of buildings as well suited to educational requirements as could be desired, but in contrast to this the educational and sanitary conditions of most local schools are far from good. The same must be said of school equipment, though that of the newer schools is excellent.

The Adult Schools, which were reorganised in 1932, are open from November to April from 6 to 8 p.m. They are held in primary-school premises with the same equipment and the same teachers. The number of pupils is not large and attendance is irregular, so that these schools have exerted little influence on popular education.

Popular education is more closely affected by the Republican Government's very original experiment of the *Educational Missions*, designed to spread ideas of culture and sound recreation in the less accessible parts of the country. A group of these missioners will stay at a centre for some days, holding meetings, sometimes in the open air, for the reading of stories, poetry or classical romances, lantern or cinematograph lectures, gramophone selections, informal talks and the like. Where possible, the programme includes popular drama, folk songs and a travelling exhibition of copies of pictures in the Prado Gallery, which is largely organised by volunteers from among university undergraduates.

The teaching staff in primary schools used to be divided into various categories with different names, but they now all share the same duties and the same title, that of " teacher of primary education." By attendance at special courses, many have gained certificates for the teaching of deaf-mutes, blind, crippled and defective children, and also for the teaching of drawing and physical training. Teachers must be Spanish citizens of at least 21 years of age; foreign qualifications are not recognised. The salaries of masters and mistresses are the same, ranging from 3,000 to 9,000 pesetas, *plus* free lodging or house allowance, and also allowances for adult school teaching. Salaries are personal to the teacher and increments are paid by the provinces. The average salary works out at 3,628 pesetas. Teachers can retire at 65 years of age or after completing forty years' service, and must retire at 70 years of age, the maximum pension being 80 per cent. of the salary.

Provisional appointments to teaching posts are made by the provincial councils or governing bodies of particular schools. For definitive appointment teachers are required to pass through short selection courses which have replaced the old competitive examinations, or they may be directly appointed at the close of the training school course. This is the system most recently introduced, the short courses being confined to existing recognised teachers. These courses consist of three parts : a period of practical study, a period of teaching practice in public schools and a third period of cultural and pedagogic training under the supervision of the university.

Teachers are irremovable, save by sentence of a court of law or by order of the central government; they are subject to the

ordinary law as regards military service, but retain their school posts during such service. The number of certificated male teachers much exceeds the vacancies, and the number of certificated women teachers is greater still, since a number of women take the training course merely for their personal instruction and with no intention of entering the teaching profession.

Secondary Education

Secondary schools were organised in 1820, 1836 and, above all, in 1845 under the name of *Institutes of Secondary Education*. Originally provincial institutions, they were taken over by the State in 1888. They have been the victims of multifarious reforms of little practical importance. Their characteristics have been that all their students have had to pass the same examination for the matriculation certificate (*bachillerato*); that they have neglected classical studies and especially Greek; that Latin has been restricted to a two-year course; that school life has been short; that, even so, there has been a lack of continuity in the curriculum, which has been dominated by mere memorising; and that educational discipline has been weak, owing to the fact that the students have attended school only during class hours. The reform movement in recent years, and especially at the present day, has aimed at correcting these defects. In 1918 was founded the *Institute-School of Madrid* under the direction of the Council for the Promotion of Education. At this school a plan of education and a curriculum similar to those commonly in use in other countries have been introduced on the lines long advocated and practised by the Free College. This experiment has set the standard for the reforms now being instituted, so far as means allow, in all secondary schools. The pre-certificate course has been lengthened to six years, boarding arrangements have been made at the school so that the students may work with their teachers outside class, and there is an increasing number of secondary schools created under the name of *local institutes* in smaller centres of population.

Owing to the contradictory character of previous reforms, a number of schemes of secondary education are still in force side by side, but the ministerial decrees which the Government has issued, pending parliamentary sanction, indicate the ultimate aim to which policy is beginning to move. The length of the secondary school course is to be seven years, and the age of admission 10. From the first year the subjects of study are to be Spanish language and literature, geography and history, French, mathematics, physics-with-chemistry and natural science, drawing and physical training. In the upper classes philosophy is to be introduced with economics, law and a second modern language, English or German. At the end of the fifth year the course is to bifurcate into a course of letters and a course of science. Latin is to be begun in the fourth year and to be continued up to the final year in the course of letters, Greek being taken also in this course in the sixth and seventh years.

Where possible, singing, handicraft and other subjects are to be taught. " Official " students, where they are not too numerous, are to be judged by their work throughout their school life and will therefore be able to obtain the matriculation certificate without special examination. Other students are to take a consolidated examination at the end of the fifth year, and another, for the matriculation certificate, at the end of the seventh year.

Each school has ten regular teachers with two special teachers of drawing and physical training and three assistant teachers. Salaries are from 5 000 to 15,000 pesetas in addition to allowances and pension rights. Twenty-five per cent. of the students may obtain free places and scholarships are granted to selected poor students.

There were 70 national secondary schools in 1931 and 91 in 1933. There are 22 local schools where the teachers are paid by the State; in all others (21 at present) they are paid by the municipality. The Republic has also created 4 Institute-Schools and 27 grant-aided colleges where the State pays two or more professors and the municipality the remainder, as well as providing the building and equipment. Boarding schools and hostels have increased and in September 1933 the government decreed the establishment of 13 additional national secondary schools, 28 Elementary Institutes (the new name for local institutes) and 36 grant-aided colleges, not only to replace the schools conducted by religious orders, but also to meet the very rapid increase of students. Whereas in 1931–2 there were 64,959 male and 11,115 female students, there were in 1932–3 approximately 40,000 recognised students and 78,000 unrecognised, or a total growth from 76,074 to about 118,000.

The outstanding characteristic of Spanish secondary education is that it has always been, and continues to be, completely co-educational.

The Universities

The ancient universities of Castile date from the thirteenth century. Palencia was an episcopal foundation, probably dating from 1212; Salamanca a royal foundation, probably dating from 1215; and Valladolid a municipal foundation, dating from 1260. All the universities in Aragon were municipal, the oldest being Lérida (1300). Universities multiplied between the sixteenth and eighteenth centuries, even in small centres of population, but the smaller ones disappeared at the beginning of the nineteenth century. There are now twelve: Madrid, which represents the old university of Alcalá (1498), translated to Madrid in 1836, Barcelona, Granada, Murcia (founded in 1915), Oviedo, Salamanca, Santiago, Seville, Valencia, Valladolid and Saragossa; and, outside the Peninsula, La Laguna in Teneriffe.

The University Faculties are: Philosophy and Letters, with three sections—Philosophy, Letters and History; Science, with four sections—the Exact Sciences, Physics, Chemistry and Natural Science; Law, with a section of Social Sciences; Medicine; and Pharmacy. The universities of Madrid and Barcelona have

all these faculties and sections. The Republic has also founded a Faculty of Economics at Madrid and Barcelona.

The matriculation certificate admits to some of the university faculties, but others require an entrance examination and one year's preparatory study. Degree courses last from four to seven years according to the faculty; students are examined yearly by the university professors in their current work. The final degree examination is optional; the degree of doctor can be obtained by the submission of a thesis defended before the university. Professors are appointed, like secondary teachers, by competition among the doctors of the faculty in a number of tests, on the result of which the chair is allotted. A professor's commencing salary is 8,000 pesetas, rising by seniority to 20,000 pesetas, with pension rights. The statistics for 1931–2 show 35,717 matriculated students, of whom 33,471 were men and 2,246 women.

University studies suffer from the deficiencies of the secondary schools; in consequence, except in individual cases, university teaching has been obliged to move on a plane below its proper standard. Generally, there has been an absence of seminar teaching or personal tutorial work, for the students have lacked the elementary education necessary to take advantage of such methods, while the professors have equally lacked the skill to apply them. In the present century this situation has considerably improved. Professors and the younger doctors have visited foreign countries with generous travelling scholarships, and on their return they have done much to revivify the teaching staff of the universities.

This revival may be expected to proceed more rapidly under the new régime, which has shown the spirit in which it approaches these problems by, for instance, the new scheme which it has already put into force for the faculties of Philosophy and Letters at Madrid and Barcelona. This scheme is framed on the best foreign models, both in its treatment of teaching methods and in its grading of degree tests.

It may be thought that there are too many universities, but there are grave difficulties in suppressing any of them. For some years a University City has been in course of construction at Madrid on, perhaps, too sumptuous a scale. The excessive number of students in some faculties makes sound teaching almost impossible. Student societies have succeeded in obtaining representation on faculty councils and on the governing bodies of the universities, and it is a sign of the times that it is the students who are most insistent on the need for substantial reforms in teaching and a reorganisation of the professorial staff.

Catalonia

On the inauguration of the Republic, the Catalan Government created a Council of Education for all grades of schools, in the hope that the Statute, then in course of preparation, would concede full autonomy to Catalonia in educational matters. This hope was

not, however, realised. The central government retains its control over all its teaching institutions in Catalonia, although, subject to this and to the provisions of the Constitution, the Catalan Government has been given the right to establish and maintain its own educational institution of all grades, within the limits of the resources assured to the Catalan Treasury by the Statute. Up to now Catalonia has not established any new Catalan primary schools, but only an Institute-School of secondary education, a training school for teachers and a few supplementary institutions. In Barcelona, a Municipal Board of Education, which has enjoyed a considerable measure of automony since 1922, has been carrying out an important work in its primary schools and connected institutions; but these schools are in no way different from the State schools, except as regards administration. The educational budget for the city of Barcelona has increased in the last two years from 4 to 10 million pesetas, and the Catalan Government itself is responsible for an additional expenditure of 5 millions.

As regards language, the Constitution provides that autonomous regions may organise education in their own languages, but that Spanish is to be a compulsory subject of study, and must be used as the medium of instruction in all institutions of primary and secondary education in the autonomous regions. In practice, policy is governed by the Decree of 1931, which provided that, in kindergartens and infant schools, teaching should be given exclusively in the maternal language of the pupil, whether Spanish or Catalan, and that in the primary schools Spanish should be taught to Catalan children from the age of 8. Teaching in the Institute-School and the training school for teachers is bilingual, and the introduction of this system is being supervised by a Language Committee. The University of Barcelona is under an autonomous governing body which is charged with the duty of securing equal privileges for Catalan and Spanish language and culture.

These are, up to the present, the main peculiarities of education in Catalonia. In addition, a *Council of Co-ordination for Secondary Education* has recently been appointed, a sign that for the moment policy in this field inclines towards co-ordination rather than towards separation and differentiation.

MANUEL B. COSSIO.

CHAPTER THREE

EDUCATION IN FINLAND

The Country and its People

THE Republic of Finland, " the land of the thousand lakes," [1] comprises an area of somewhat more than 388,000 square kilometres, which means that it is the sixth largest country of Europe. The peculiar charm of its scenery has, in the latter years, drawn an ever-increasing stream of tourists to Finland. The country is thinly populated, having an average of about ten inhabitants per square kilometre. The population amounts at present to about 3,700,000, 250,000 of whom, however, live in other countries. The Evangelical Lutheran church is the State Church. The population consists of Finns (approximately 89 per cent.) and Swedes (approximately 11 per cent.). Only about one-sixth of the whole population live in the towns. There are 38 of these, as well as 21 townships. Most of them are small and unimportant. The largest is the capital, Helsinki, " The White City of the North," founded in 1550, with 260,000 inhabitants. Next in size is Turku (Åbo), the capital until 1812, which dates from the Middle Ages and has a population of 68,000 inhabitants. Of the other towns and townships, 32 have less than 5,000 inhabitants, 20 between 5,000 and 20,000, and five between 20,000 and 60,000. During the last thirty years the rural population has increased by 26 per cent. and the population of the towns by 91 per cent. About 15,000 persons emigrate every year. The population is generally literate.

Finland was united with Sweden till 1809 ; thereafter it belonged, as an autonomous Grand Duchy, to Russia till 1917, in which year it became a free and independent State.

Finland is an agricultural country, where, in spite of a hard climate and a barren and stony soil, about two million persons live on the land, although not one-tenth of the area is cultivated. In no other European country is it as easy to obtain new arable land as in Finland. The Government has also in recent years done much to procure land for the unpossessed. The estates and farms are generally small.

Cattle-farming is also important. There are about 500 co-operative dairies in Finland. The butter produced is exported chiefly to England. At the coasts fishing is an important source of livelihood. The woods constitute the greatest wealth of Finland. The forests yield annually produce worth more than the total harvest from the cultivated land. The greater part of the timber exports also goes to England. Industry is developing from year to year.

[1] As a matter of fact, there are about 40,000 lakes in Finland.

Finland has, instead of black coal, its " white coal," the mighty waterfalls, which are estimated to represent three million horse-power. The country has, in all, about 3,000 factories, in which 130,000 labourers are employed. First in size is the sawmill industry (nearly 500 sawmills), but the paper, tobacco, iron and textile industries are also important; the mercantile marine is, to be sure, only one-hundredth of that of England, but more than 20,000 people derive their living from it, while the Åland Islands can claim the biggest owner of sailing vessels in the world.

The Secondary-school System

History

Education in Finland can trace its origin to the labours of the Catholic Church. The oldest school in the country, the cathedral school in Turku, was probably founded at about the same time as the cathedral itself, the stateliest piece of church architecture in Finland, built in the thirteenth century. Certain monastery and town schools are also mentioned in the history of these distant times. It was not, however, until the reformation, in the sixteenth century, that the school system achieved a greater degree of stability and development. This was done by special legislation in the form of school edicts. The first school edict in Sweden-Finland was issued in 1571, and was a close copy of the first evangelical edict of that sort in Germany, that of Saxony in 1528. It was, therefore, conceived wholly in a humanistic spirit, to give an education with Latin rhetoric as the principal component. During the seventeenth century the school system was modified several times. Different types of school came into being, such as *Pedagogia*, or lower schools, in the smaller towns, *Trivial* schools in the larger, and *Gymnasia*, of which there were, however, only two (in Turku and Viipuri). In the rural districts, too, some lower schools were founded. Some non-classical subjects were also introduced into the curriculum. The school regulations of the year 1724 were, in spite of the growing demands for a more modern curriculum, still strongly humanistic in their conception, yet they remained in force in Finland until 1843. In that year a new school regulation was issued, dividing the schools into lower and higher elementary schools and *gymnasia*, in addition to which the first State schools for girls (with two forms) were established.[1] Previously the schooling of the girls had been provided for exclusively by private initiative.

[1] As early as 1785 a girls' school had been opened in Viipuri, but this city and its province (Old Finland) belonged, since 1721, to Russia, and the Empress Catherine II reorganised the school system here, as in the rest of Russia, according to her philanthropistic principles, with normal schools, district schools, *gymnasia* and girls' schools. The language of instruction was German. When, in 1809, the whole of Finland was incorporated in the Russian Empire, the province of Viipuri was reunited with the rest of the country in 1811, but the school conditions were not brought into conformity with those of the mother country till 1843.

Recent Changes

The school legislation still in force in Finland dates from 1872, but has since then been modified in a number of points. From this time the State schools were divided into two categories: *Lyceums* with eight forms (classical and modern), leading to the university, and modern schools (later primary schools) with shorter courses, intended to prepare partly for higher schools, partly for technical schools of different kinds. The primary schools are, since 1914, called middle or intermediate schools. In this year the *lyceums* were reorganised in such a way that the five lower forms now constitute an intermediate school with a complete course, while the three higher forms (the gymnasial forms) are divided into two sides, the classical and the modern, both leading to the university. The girls' schools were made to comprise six forms, besides which girls' *lyceums* with nine forms were established. All these are built upon the knowledge imparted in the second standard of the higher elementary school, i.e. the two lower standards of the higher elementary school constitute the preparatory school for the secondary school. A school Act of 1928 has, in addition, created secondary schools of a new type, based on a complete six-year course in an elementary school. In these schools the gymnasial forms are divided into three sides: a mathematical and scientific, a modern language and economics, and a classical. The complete *lyceum* comprises here six forms, the intermediate school three. A Government committee has recently (1932) put forward a proposal for a thoroughgoing reorganisation of the secondary school, according to which it is to be built, as far as possible, on the completed elementary-school course. This proposal is at present being discussed.

Present Organisation

The different types of State secondary schools are then, at present, as follows:

I. (*a*) *Lyceums*—
comprising eight forms, with alternative sides in the gymnasial forms. The five lower forms constitute an intermediate school, while the three higher, the gymnasial forms, are divided into a classical and a modern side. The number of such lyceums is 40 (32 Finnish-speaking and eight Swedish-speaking). 21 (16 Finnish and five Swedish) are boys' schools, while 19 (16 Finnish and three Swedish) are co-educational.

(*b*) *Classical lyceums*—
for boys, four in number (three Finnish, and one Swedish). These schools, which are not divided into sides, are the only ones in which Greek is studied.

(*c*) The two *Normal Lyceums*—
for boys (one for each language), both in Helsinki. These, which also serve as training schools for secondary-school

teachers, comprise both a classical lyceum and a lyceum with alternative sides in the gymnasial forms.

(*d*) *Girls' lyceums*—
with nine forms, eight in number (seven Finnish and one Swedish).

II. *Intermediate schools*—
with five forms, co-educational, eleven in number (eight Finnish and three Swedish).

III. *Girls' schools*—
with six forms, twelve in number (eight Finnish and four Swedish).

All the schools mentioned above are built on the knowledge imparted in the second standard of the higher elementary school. Frequently they admit, however, pupils from preparatory schools, comprising two or three forms, which are quite private and receive no State aid. The number of these was 65 in 1930 (27 Finnish and 38 Swedish), and they had in all 3,870 pupils (2,129 Finnish and 1,741 Swedish).

IV. *Secondary schools of the new type*—
have been formed as a result of a compromise during the attempts to solve the difficult question of making the elementary school the basic school for all. These secondary schools are built on a complete course in an elementary school and consist either of *lyceums* with six forms and intermediate schools with three forms (both of these may be either boys' schools or co-educational), or of girls' *lyceums* with seven and girls' intermediate schools with four forms. At present there are only ten such schools, seven *lyceums* (four for boys and three co-educational) and three girls' schools. In nine of these Finnish is the language of instruction.

When to these is added the Finnish girls' *gymnasium* in Helsinki, we find that the number of State secondary schools is at present 88, of which 69 are Finnish-speaking and 19 Swedish-speaking.

Teaching Stuff

The teachers are called " senior lectors," " junior lectors " and—chiefly in the non-examination subjects—simply teachers. In the Normal Lyceums those teachers who direct the training of the secondary-school teachers are called " Directors of Teaching." To qualify for a post as lector, a candidate is generally required to hold the degree of *candidatus philosophiae*, corresponding to a bachelor's degree, and in addition to submit to a year's training at a Normal Lyceum and to pass there a practical examination in teaching, as well as a theoretical examination in education given by the professor of education. The basic salary for a director is 57,000 Finnish marks,[1] increasing to 63,000 marks after ten years' service.

[1] Par of Exchange: 193.23 marks to the £.

For senior lectors the salary varies between 52,500 (at a Normal Lyceum) and 43,500 marks, for junior lectors between 48,000 and 39,000. Senior lectors are required to teach 24 periods a week, junior 26. For every five years of service up to fifteen years the basic salary increases by 4 per cent. (for salaries not less than 30,000 marks; if the salary is smaller than this sum, the increment is granted for periods of four years four times, the percentage being the same). At the age of 63 a teacher is entitled to a pension, but he is not obliged to resign before he is 67. The Government can, however, give him the right to remain in his office till he is 70. Full pension amounts to 60 per cent. of the basic salary. What has been said here of the increments for years of service and of pensions as regards teachers holds good for all civil servants.

Private Schools

Beside the State schools there are in Finland a great number of State-aided private secondary schools. The first private school of importance was Helsingfors Lyceum, founded in 1831, in which new educational principles and methods were put into practice and where, among other reforms, gymnastics were introduced earlier than into any other school. Here the greatest poet of Finland, J. L. Runeberg, gathered his earliest educational experience. As early as 1812, "the first Pestalozzian of Finland," O. H. Gripenberg, had founded his private "Educational Institute," which was carried on in the spirit of the Swiss schoolmaster, but, unfortunately, it soon came to an end. In 1835 his wife opened the first girls' school in Finland (not taking into account the girls' school in Viipuri mentioned above). In all these schools Swedish was the language of instruction. In the course of time private Finnish schools, too, came to be established, chiefly because the Government failed to take initiative in this matter. The first Finnish secondary school was founded in 1858. When later, at the end of the century, interest in the education of women began to increase, the question of co-education arose, influenced by the school conditions in America. The first Swedish-speaking co-educational school was founded in 1883, the first Finnish-speaking in 1886, both in Helsinki. A representative of the "new education," so far the only one of its kind in Finland, is the Swedish Co-educational School in Tölö (a quarter of Helsinki), founded in 1928 by its present headmaster, Mr. L. Zilliacus.

The private secondary schools at present outnumber by far the State schools. Those which have the privilege of matriculation are as many as 71 in number (51 Finnish and 20 Swedish). The number of intermediate and girls' schools is 73, of which 66 are Finnish and seven Swedish. The private secondary schools of the new type are 17 (all Finnish).

Some of the private schools are supported by the communes (local authorities), but only two of those leading to the university are so supported. Others are maintained by societies formed for

their support or by private persons. These are of the same type as the State schools and also follow, to a great extent, the same curricula. During recent years several of the private schools have been taken over by the State.

In so far as the private schools obtain aid from the State, they are subject to the same regulations as regards supervision and inspection as the State schools. They have, however, a certain freedom in financial and certain other internal matters; e.g. they can appoint and dismiss their own staff.

Private secondary schools now receive State grants on the following basis:

(*a*) 33,000–38,000 marks annually for each form;

(*b*) 18,000–23,000 marks annually for each parallel form;

(*c*) grants, determined in each case by the Government, for maintaining alternative sides in the gymnasial forms;

(*d*) an additional grant of 8,000 marks per school year for every teacher who has the qualifications prescribed for corresponding State schools. In each school corresponding to a State intermediate school there must be at least three such fully qualified teachers, and in schools corresponding to a complete *lyceum* at least five.

As regards salaries, there has been a general tendency to offer the formally qualified teachers in the private schools the same salary as junior lectors in a State school. The teachers in the private schools have their own pensions fund.

Development over Twenty Years

The following table shows the growth of the secondary schools (both private and State) during the last twenty-year period for which statistics are available:

YEAR	NUMBER OF TEACHERS		NUMBER OF PUPILS				TOTAL
	FINNISH	SWEDISH	FINNISH	SWEDISH	BOYS	GIRLS	
1909–10	1,215	675	16,740	6,794	11,754	11,780	23,534
1920–1	1,620	760	23,379	9,132	14,936	17,575	32,511
1927–8	2,274	793	37,189	9,645	21,235	25,599	46,834
1929–30	2,416	772	39,174	9,404	21,951	26,627	48,578

The Elementary School

History

Certain *Pedagogia* or lower schools established in the seventeenth century in the rural districts have been called the first elementary schools of Finland. They were, however, rather secondary schools in character, though of the most unpretentious kind. The popular education of the whole seventeenth, as well as of the eighteenth, century had as its object chiefly the teaching of Christianity and the

ability to read. The aim was ecclesiastical and the teaching was entrusted to the ministers assisted by sextons, local scribes, etc. The requirements for admission to Holy Communion were, at first, the Ten Commandments and the Lord's Prayer, from 1695 the whole catechism. Thus the ability to read was gradually spread among the people. Only in exceptional cases were the first principles of writing and reckoning taught.

It was not till the eighteenth century that the thought found expression that public education ought to include more than religion and associated subjects. The question how to organise public instruction began to be discussed. The ideas of Pestalozzi about popular education gained ground also in Finland. The Bell-Lancaster monitorial system became known. Gradually the desirability of building an elementary-school system was realised. The word which gave birth to the elementary school was finally pronounced at a session of the Finnish Senate in 1856, when the Emperor Alexander II directed the Government of Finland to draw up a plan for organising schools for the education of the people in the rural communes. The Reverend Uno Cygnaeus, " the father of the elementary school in Finland," was sent abroad with a State scholarship to study elementary-school systems. On his return he drew up a plan, which gave rise to the Elementary School Statute of 1866, which, though altered in a number of details, is still in force in Finland. According to the plan of Cygnaeus, the elementary school ought to give an all-round education for citizenship and not only serve religious ends. For this reason the elementary school was made independent of the Church, which had hitherto been in charge of all schools, and was put under the direction of a special Board of Education. The elementary school is, to this day, more independent than its counterpart in the Scandinavian countries and Germany. The " modern " subjects were given a place in the curriculum. Instruction in handicrafts was given to bring the school into closer contact with the people, as well as to promote manual skill and initiative. A characteristic feature of the elementary school is the uniformity of its organisation throughout the country. Impoverished children are given help in the form of food and clothing, school kitchens are general and most communes have employed school physicians, assisted by school nurses. The schools are communal institutions maintained chiefly by local rates, but also receive a considerable support from the State.

Compulsory Attendance

School attendance is compulsory for the children of Finland (the School Attendance Act of 1921). The school age lasts from the 7th to the 13th year or, if the requisite standards have not been reached, to the 14th. In addition to this, the children are required to attend a continuation course during the two following years, if their further education is not provided for in some other way. The elementary schools are to be so distributed that the children

do not generally have a longer distance to go to their school than five kilometres.

Organisation

A complete elementary school comprises a lower school with two standards, and a higher with four, both of which work for 36 weeks of the year, each with its own teacher. In those districts where the number of pupils of higher elementary-school age amounts to at least 30, a higher school must be established, and, if the number of children of the lower-school age is at least 15, a lower school must be joined to the higher. If the number of children is less, a school with a shortened course is to be instituted in the district, working for 40 weeks of the year, for 12 as a lower and 28 as a higher. Where the total number of children of school age is less than 20, the commune is not required to provide for their education in their own district, but to contribute to their attendance at a school in another district.

The number of children taught together in the higher school may not exceed 50, in the lower 40. If the number of pupils is greater, the district is divided or an assistant teacher is employed.

The school year in the rural higher elementary school begins not later than September 1st. The Christmas holidays last at least three weeks. The dates for beginning and ending the school year at the lower school are determined by the local Board of Governors. The school year must not, however, begin before August 1st, and holidays of longer duration have to be given in the coldest and darkest season. The number of hours per week is 32 for the higher school and 24 for the lower. A teacher in a higher school is required to teach a maximum of 30 periods a week.

Time-table

The number of hours in the different subjects is not absolutely fixed, but the time-table in the higher school generally approximates to that given below:

SUBJECT	STANDARDS I AND II	STANDARDS III AND IV
Religion	4	4
History	–	2
Local and General Geography	3	–
Nature Study (with Geography)	–	6
The Mother Tongue	7	5
Calligraphy	2	–
Arithmetic and Geometry	4	4
Drawing	2	2
Singing	2	2
Gymnastics	2	2
Handicrafts (Carpentry)	4	4
	Total 30	31

Growth of the School System

The growth of the elementary schools is shown in the following table :

YEAR	RURAL SCHOOLS			URBAN SCHOOLS	
	NUMBER OF SCHOOLS	NUMBER OF TEACHERS	NUMBER OF PUPILS	NUMBER OF TEACHERS	NUMBER OF PUPILS
1875–6	285	294	11,421	180	6,483
1885–6	667	683	24,305	439	14,251
1895–6	1,273	1,396	56,956	711	23,098
1905–6	2,400	2,831	100,406	1,036	30,043
1915–16	3,305	4,432	152,643	1,398	41,694
1925–6	8,204	8,666	302,399	1,539	40,234
1929–30	9,487	10,291	358,892	1,551	41,049

In the school year 1929–30 5,114 of the rural elementary schools were higher and 4,373 lower. Of the higher schools 4,572 (89·4 per cent.) were Finnish-speaking and 535 (10·6 per cent.) Swedish-speaking; of the lower 3,794 (86·8 per cent.) Finnish and 574 (13·2 per cent.) Swedish. 2,803 of the teachers in the higher rural schools were men (40 per cent.) and 4,131 women (60 per cent.). 91·6 per cent. of the pupils were Finnish-speaking, 8·4 per cent. Swedish-speaking. Three per cent. were children of salaried employees and persons engaged in responsible positions in industry, trade, or agriculture, 55 per cent. of small-holders and persons engaged in industrial or trade enterprises on a smaller scale and 42 per cent. of labourers and other wage-earners.

During this same year, 501 of the teachers in the urban schools were men (32·3 per cent.) and 1,050 women (67·7 per cent.). Of the pupils, 35,423 were Finnish-speaking (86 per cent.) and 5,626 Swedish-speaking (14 per cent.). As regards the occupation of the parents, 7·3 per cent. were children of salaried employees and persons engaged in the professions and in responsible positions in industry and trade, 30·3 per cent. of persons engaged in industrial and trade enterprises on a smaller scale and servants, and 62·4 per cent. of labourers and other wage-earners.

The total expenditure for the rural elementary schools amounted, in the year 1927, to about 305 million marks (943 marks per pupil), and for the urban schools, in 1929, to nearly 100 million marks (1,951 marks per pupil).

Schools for Defective Children

The schools for defective children have a similar fundamental aim to that of the elementary school in general. The first school in Finland for deaf-mutes was opened in Porvoo (Borgå) in 1846 (private). In 1860 a similar school was established in Turku, and the following year one in Ostrobothnia. The first school for

the blind was founded in Helsinki in 1865, for the mentally defective in 1877.

All the schools for defective children are now State institutions. At present there are in Finland six schools for deaf-mutes (five Finnish and one Swedish) with 533 pupils (475 Finnish and 58 Swedish), and two schools for the blind, one for each language, with 112 pupils (103 Finnish and nine Swedish). There is still only one institution for the education of the mentally defective. The number of pupils is 121, of whom 103 are Finnish and 18 Swedish. The public expenditure for the deaf-mute schools is approximately 5,000,000 marks, for the schools for the blind approximately 1,350,000 marks and for the mentally defective approximately 1,600,000 marks.

Church Primary Schools

Mention should also be made of the *Ecclesiastical Primary Schools*, a relic from the past which is fast disappearing. These schools are directed by the Church and aim chiefly at teaching religion, reading and writing, as well as at laying a foundation for the later confirmation. Since the passage of the School Attendance Act their importance has decreased year by year, while the number of communal lower elementary schools has increased. In 1920 their number was still 1,407, but in 1925 it had fallen to 867 and in 1930 to 407.

Folk High Schools

The Folk High Schools, which in the forties came into being in Denmark on the initiative of Grundtvig, gradually gained ground in Finland too. The question of founding such schools was discussed as early as the sixties, but they did not become a reality till 1899, when a Finnish High School was founded in Kangasala and a Swedish in Porvoo (Borgå). These schools are private institutions, but enjoy considerable support from the State. They are at present probably the most important rural institutions for training in all-round citizenship. Their chief aim is to offer to the growing generation impulses and knowledge that will further their personal growth and their sense of responsibility towards the country and society. The age of admission is 17 years (for girls 16). The annual courses are held from November 1st to May 1st. In 1933 there are 55 such schools in Finland (40 Finnish and 15 Swedish), with 3,101 pupils in all, of whom 2,541 are Finnish and 560 Swedish. 908 of the pupils are men, 2,193 women. The total expenditure amounts to about 27,800,000 marks, 10,700,000 of which are State grants.

Adult Education

The Working Men's Institutes aim at the enlightenment of the working classes and the spread of an interest in cultural pursuits

and citizenship. As against the Folk High Schools, which work in the rural districts, the Working Men's Institutes have directed their attention to the labourers in industrial centres and in towns. The first institute of this kind began its activity in Tampere in 1899. These institutes are mostly communal and in receipt of State grants. Their number is (1933) 40, in 36 of which the language of instruction is Finnish and in four Swedish. The number of pupils is at present 14,285, of whom 12,707 are in the Finnish and 1,370 in the Swedish institutes. The total expenditure amounts to approximately 5,700,000 marks, to which the State contributes approximately 2,300,000.

The people of Finland have, even after leaving school, opportunity to study and learn during their whole life. Cultural societies of different kinds, the popular libraries increasing in number and size every year (at present there are about 1,500, over 1,000 of which are supported by the State), the 700 daily papers and periodicals, numerous popular lectures paid for by the State, the wireless broadcasting programmes, which penetrate to the most distant corners of the country—all have the same end: to offer useful knowledge and inspiring thoughts, to lead the people of Finland forward and upward.

The Training of Teachers

Secondary-school Teachers

While Finland was still united with Sweden, serious efforts were made to provide a theoretical as well as a practical training for teachers. The initiative was taken by the central board for all the schools in the Kingdom, which had been fashioned on the corresponding German institution. These efforts gained strong support at Turku (Åbo) Academy (the first university of Finland), where the various professors had already tried to include in their courses some instruction in teaching methods. In addition to this the distinguished professor, H. G. Porthan (1804), had given private courses in education. In 1806 a *Seminarium Pedagogicum* was established at the Academy, in which lectures on education and teaching methods were given, as well as opportunity for practical training. This training college, however, ceased its activity after twenty years. In 1854 a chair in educational theory was established at the University, which had now been transferred to Helsinki.

After some years two Normal Schools (later called *Normal Lyceums*), a Finnish and a Swedish one, were instituted in this town for the training of secondary-school teachers. Candidates for teaching in the secondary schools, who have obtained their degree at the university, submit to a year's training at the Normal Lyceums, the Finnish-speaking at the Finnish and the Swedish at the Swedish, during which time they attend the lessons, practise teaching under the guidance of the Directors, and take part in educational conferences, at which the Directors or the Professor of Education act as

chairmen. For a post as teacher in the State schools a candidate must, in addition, pass a practical examination in teaching at a Normal Lyceum, judged by a Committee of Directors, and a theoretical examination in education set by the Professor of Education.

Elementary-school Teachers

The training of elementary-school teachers takes place in the training colleges. These are of two kinds: training colleges for teachers in higher elementary schools and colleges for lower elementary-school teachers. All these colleges are supported by the State.

The first training college for elementary-school teachers was founded in 1863 at Jyväskylä, the language of instruction being Finnish. At present there are in Finland eight such colleges, six Finnish-speaking and two Swedish-speaking. Three of these are men's colleges and three women's, while two have separate divisions for men and women. The colleges are built on the completed elementary-school course and gave a four-year course until 1916, when the course was extended to five years. In the four lower forms general educational subjects are studied, while in the highest form special psychological-educational studies are carried on and practice in teaching is given in the practice school which is attached to the college and organised as an ordinary elementary school.

For about ten years past there has existed another type of training college, represented by some Finnish-speaking colleges which are based on the completed intermediate and girls' schools and give a three-year course.

For some time past those who have passed the university entrance examination, and others with corresponding qualifications, have been admitted to the colleges as special pupils where vacancies have been available. These have been able to qualify as elementary-school teachers after one year.

At present there are strong tendencies in the direction of making the matriculation examination to a still greater extent the necessary entrance qualification for the training colleges. To this end a pedagogical high school (Finnish-speaking) with a two-year course intended to replace some of the old colleges, is at present being planned.

Training colleges for the lower elementary-school teachers have not existed till quite recently. There are at present four of these, all for women. Three of them are Finnish, one Swedish. They are based on the completed elementary school and give a two-year course. The practice school is organised as a lower elementary school.

The minimum age of admission to all these colleges is 17 years.

Instruction in the colleges is given by their directors and by lectors and teachers, whose qualifications, teaching obligations and salaries are substantially the same as for the secondary schools.

The Administration of the School System

The school, in Finland as elsewhere, is a child of the Church and was therefore at the beginning under its direction. The supervision over the schools was exercised by the Bishop and the Chapter. The separation between Church and school dates from as late as 1870, when a special board of direction was appointed, now called the Board of Education. This Board of Education is subordinate to the Ministry of Education and is presided over by a Director-General. The members are called Directors of Education. Their duties include the inspection of the schools, both State and private. The Board consists of three departments: one for the Finnish-speaking elementary schools, one for the Finnish-speaking secondary schools and one for all the Swedish-speaking schools. Each department is in charge of one of the Directors. Common to all departments are a man and a woman inspector of gymnastics, sports and hygiene, an inspector of drawing and carpentry for boys, and one of needlework and domestic science for girls. The Board has also its own Accounting Office.

For the purpose of inspecting the rural elementary schools, the country is divided into 40 districts with an inspector in each district, while every town has its inspector. The urban elementary-school inspectors are, in contrast to those for the rural districts, not State civil servants but local (communal) officials. Their appointment is, however, submitted for approval to the Board of Education.

The schools in the province of Aland, which enjoys self-government, are subordinate to the Provincial Governing Board of Åland. The province has its own inspector of elementary schools. The Board of Education of Finland has, however, certain supervisory powers, both over the elementary schools of the province and over its single secondary school.

In each secondary school, State as well as private, there is a Parents' Council, consisting of five members appointed by the Communal Council. Its duties are to follow the activities of the school and promote its development, to assist the Board of Education in its supervision of the school and to further co-operation between it, the community at large and the parents.

Each private secondary school has its own Board of Governors which directs the activities of the school and both appoints and dismisses the teaching staff. These schools enjoy autonomy in the conduct of their own finances. In regard to other internal matters the schools have to follow what is laid down in general educational laws and regulations and in the particular statutes sanctioned by the Board of Education for each particular school.

The elementary schools are under the direction of the local (communal) authorities. The commune is entitled to arrange its own elementary-school system, within the framework of the law and administration of the country at large, through regulations sanctioned by the Board of Education. The administration of each local

school is in the hands of a Board of Governors, who manage its finances, appoint the teachers (the appointment is confirmed by the inspector), keep the register of the children of school age in the district, and examine and sanction, together with the inspector, the programme of the school drawn up by the teachers.

Higher Education

There are three universities in Finland: the State University of Helsinki, and a Finnish and a Swedish academy in Turku, both the latter maintained by private foundations.

The University of Helsinki

The State University is the most important. It was founded in 1640 at Turku, which was then the capital, but removed to Helsinki in 1828. At present (1933) there are 88 ordinary professors as well as 29 special and 19 assistant professors, besides 130 lecturers, 11 readers and about 50 other teachers. In 1901 women were allowed to pursue studies at the University, though a few (the first in 1870) had previously carried on their studies there by special permission of the authorities. As early as 1882 the first woman was awarded the degree of *magister philosophiae*.

To qualify as teachers in secondary schools and training colleges examinations have to be passed in the faculty of philosophy (either in the section of history and philology, or in that of mathematics and natural philosophy), or (for teachers of religion) in the faculty of theology. The minimum qualification is the degree of *candidatus philosophiae* (corresponding to a bachelor's degree), which is given for proficiency in at least four branches of study. The proficiency of the examinee in the different branches is indicated by the terms *approbatur*, *cum laude approbatur* and *laudatur*. To obtain a degree the examinee is required to attain the standard of *laudatur* in at least two branches and, in addition, either *approbatur* in two or *laudatur* in one, *cum laude approbatur* in two and *approbatur* in one.

A *canditatus philosophiae* has the option of working for the degree of *licentiatus philosophiae*. In order to obtain this degree he has to show " profound and distinguished learning " in three branches and to write a thesis in one of these branches.

A *candidatus philosophiae* is entitled, without further studies, to the degree of *magister philosophiae*, which is given either *in absentia* or at the periodically recurring ceremonial granting of degrees. The *licentiatus philosophiae* is similarly entitled to the degree of *doctor philosophiae*.

A Teachers' Examination in five subjects, in none of which the standard of *laudatur* is required, also qualifies for lower posts in secondary schools.

It may be added that advanced studies in agriculture and forestry may now also be pursued at the University. An institute of

gymnastics, at which future teachers of gymnastics can obtain their qualifying examination, is also connected with the university.

The figures below give an idea of the development of the University of Helsinki during the last half-century.

UNIVERSITY OF HELSINKI

	1880	1890	1900	1910	1920	1930	1931
Population . .	2,061,000	2,380,000	2,713,000	3,115,000	3,365,000	3,658,000	3,697,000
Male:							
Enrolment . .	1,047	1,718	1,964	2,123	1,880	3,250	3,486
Attendance. .	626	903	*	1,812	1,670	3,042	3,270
Female:							
Enrolment . .	1	17	354	600	698	1,876	2,171
Attendance. .	1	14	*	512	625	1,762	2,033
Total:							
Enrolment . .	1,048	1,735	2,318	2,723	2,578	5,126	5,657
Attendance. .	627	917	1,171	2,324	2,295	4,804	5,308

* Not available.

The Two Private Universities

The two young academies in Turku are modest as compared to the State University.

The Finnish *Turun Yliopisto* (Turku University) was founded in 1920. This university consists of two faculties: humanities, and mathematics and natural philosophy. There are 15 professors, four lecturers and three readers. The number of students in 1931 was 421 (214 men, 207 women).

Åbo Academy (Swedish-speaking) was founded in 1917. It comprises five faculties: humanities, mathematics and natural philosophy, political science, industrial chemistry, and theology. There are only 23 ordinary professors and two special, besides seven lecturers, eight readers, and about twenty other teachers. A Swedish Institute of Commerce, with five professors, four readers and nine other teachers, is connected with the Academy. In 1931 the number of students attending the Academy was 242 (178 men, 64 women).

The degrees and the courses at these academies are in the main the same as at the State University, though not all corresponding examinations can be taken there since these institutions are still incomplete.

Other Institutions

Other institutes of higher education are:

(*a*) The Institute of Technology in Helsinki. This is maintained by the State and was evolved in 1870 from the "polytechnical school" founded some years earlier, which had previously been a technical "modern" school dating from the middle of the century. The Institute of Technology consists of five sections: architecture,

civil engineering (roads, waterworks and agriculture), mechanical engineering (machine building, electro-technics and factory procedure), chemistry and surveying. The number of professors is 30, with 11 readers and 17 other teachers. In 1930–1 the total number of students attending the Institute was 745 (of whom 43 were women). 539 were Finnish-speaking, 198 Swedish-speaking, while eight belonged to some other language group.

(*b*) The Higher Finnish Institute of Commerce has six ordinary professors and one special professor, five readers and seven other teachers. The number of pupils in 1930–1 was 235 (of whom 40 were women).

(*c*) The Higher Swedish Institute of Commerce has in all fifteen teachers. In 1930–1 the number of students was 210 (of whom 39 were women).

The Institute of Commerce at the Åbo Academy has already been mentioned.

Technical Schools

Finland is, above all, an agricultural country. The first school of agriculture was established by the State at Mustiala in 1838. At present there is a very large number of schools promoting agriculture : four institutes for control and inspection, four agricultural colleges, seven schools of farming, 39 schools of agriculture, 39 schools of housewifery, one horticultural college, four schools of horticulture, 44 schools of cattle-farming, four dairy schools, five schools of domestic science, and more than a hundred schools for domestic handicrafts. For the promotion of forestry there are four forestry schools. In addition to the three higher commercial schools already mentioned, there are 21 commercial institutes and commercial schools (17 Finnish-speaking, one Swedish-speaking and three bi-lingual), catering for commercial training. The first commercial school was founded in 1839 at Turku. For the training of sailors there are two nautical institutes (one for each language), and four schools of navigation (two Finnish-speaking, one Swedish and one bi-lingual). Technical instruction is provided by the Institute of Technology already mentioned and, in addition, by two technical schools (one for each language) and six industrial schools (four Finnish-speaking and two bi-lingual). For musical education there is in Helsinki an Institute of Music, founded in 1882.

ALFONS TAKOLANDER.

CHAPTER FOUR

The Catholic Schools of France

IT is always a delicate task for a Frenchman to explain to the foreign reader the educational system of his country, for he is dealing with a problem of the greatest difficulty—a question of conscience, which arouses intense feeling and tends to envelop the school in an atmosphere of conflict. Nevertheless, it is in a spirit of calmness and complete impartiality that the author of this essay seeks to draw, in these pages, an accurate picture of the voluntary-school system of his country. It is his aim to show, without any thought of partisanship or any desire to depreciate what is being done in other spheres of education:

(1) How the Catholic voluntary school[1] system was founded, and how it has been legalised.
(2) How it has organised itself for the purpose of safeguarding its original aims, and
(3) What results it has secured and what services it has rendered.

We shall confine ourselves here to the Catholic voluntary school system, but it should be remembered that, side by side with it, have grown up other voluntary schools, some secular and some denominational (Protestant or Jewish) which enjoy the same autonomy. Further, in the statistics quoted in this chapter, we shall exclude Alsace-Lorraine, where the system of public primary education remains denominational in virtue of legislation enacted before 1870.

The information set forth in this chapter rests on enquiries conducted personally by the author, who is therefore solely responsible for its contents. He has, however, been able to make use of a number of unpublished documents, and also of studies and special monographs, of which the Musée Pédagogique at Paris contains what is undoubtedly the most complete collection.

I. Historical Development

As is well known, education in France (pending the realisation of the *école unique*) still preserves its traditional division into three grades—primary, secondary and higher. Similarly, the voluntary school system was established by three successive legislative acts—

[1] Throughout this chapter we have, in most places, been obliged to translate the French phrases *enseignement libre* and *école libre* by their nearest English equivalent, "voluntary schools," as "free education" has acquired quite a different meaning in the English language. This is unfortunate, as the ideal which inspires the "separate" school systems of France and other continental countries can only be properly understood if the reader remembers its close connection with the conception of "freedom."

the Act of 1833 for primary, the Act of 1850 for secondary and the Act of 1875 for higher education.

The Napoleonic Monopoly : 1808–33

During the first third of the nineteenth century, the University of France, established by the imperial decree of 1808, preserved the monopoly granted to it by Napoleon. " No one," in the Emperor's words, " shall open a school or teach publicly unless he is a member of the Imperial University and a graduate of one of its faculties." The University might, indeed, accord recognition to *institutions* or *pensions* where the provision made by the official *collèges* was insufficient, but it exercised strict supervision over such supplementary institutions, as well as over the *petits séminaires* or ecclesiastical secondary schools. It exercised this supervision by inspection, by a school tax which was a poll-tax payable in respect of each pupil, and finally by imposing on all candidates for the *baccalauréat* the obligation of attending the higher classes of the State *collèges* and *lycées*. When the *Frères des Ecoles Chrétiennes* were authorised to reconstitute themselves and to teach, they were required to affiliate themselves with the University.

After Napoleon's fall, the Restoration emancipated the *petits séminaires* from University jurisdiction, but, in 1828, two royal decrees limited the number of their pupils and excluded the Jesuits from their management. In spite of the presence of bishops like Frayssinous and Feutrier at the head of the University, Catholics distrusted the teaching given in the official schools, and they pressed for the abolition of the University monopoly.

The Liberation of Primary Education : 1833

On the morrow of the Revolution of 1830, the new *Charte* promised " freedom of teaching," to be granted in the near future. As this promise was not immediately fulfilled, Montalembert and Lacordaire opened at Paris in 1831 the first *école libre*. The school was closed by the police and, after a famous trial, the Chamber of Peers condemned the two founders ; but their courageous venture had definitely raised the question of freedom of teaching. In 1833, Guizot, in reorganising primary education by the Act of June 28th, contemplated and authorised the establishment of " private primary schools." Teachers in them had to satisfy three conditions : they must have reached the age of 18. must possess the " *brevet de capacité* " and must possess also a certificate of moral character.

The Liberation of Secondary Education : The Loi Falloux, 1850

After this first success, the ambition of Montalembert and the Catholic party was to extend the liberty thus secured to the secondary grade of education, but, in spite of a keen campaign conducted for eight years, the Government of Louis-Philippe refused to take this step. It was only under the Second Republic that the Act of

March 15th, 1850, drafted by de Falloux, put an end to the University monopoly. It not only gave to the religious orders (*congrégations*) a wider liberty in the sphere of primary education, but it extended this freedom to the secondary grade on the most generous scale. In future, every Frenchman who possessed a simple bachelor's diploma and had completed a five-year course in an institution of secondary education could open and maintain a *collège*.

This *loi Falloux*, the essential provisions of which have not been changed, remains the charter of the voluntary school. Its immediate effect was to enable laymen, but more especially the Church and religious orders, to multiply institutions of secondary education. Already, in 1854, Catholics had opened 1,081 voluntary institutions. On the other hand, the voluntary schools are apparently now about to be deprived of the privilege accorded to them by the Duruy Act of June 21st, 1865. That Act organised a special system of secondary education, without Latin, and allowed voluntary schools to share in this system ; but, under a recent Act, the Gaston Martin Bill, voluntary schools founded under this Act of 1865 will be required to reorganise themselves within one year.

The Liberation of Higher Education : 1875

Catholics had still to secure freedom of teaching in the sphere of higher education, with the right to establish universities. On the initiative of Dupanloup, Bishop of Orleans, a great educationist who had already taken part in the preparation of the *loi Falloux*, the National Assembly passed an Act for this purpose on July 25th, 1875. Under this Act, at examinations for university degrees the grant of diplomas was placed in the hands of mixed juries formed of professors representing the official and the voluntary institutions. Five Catholic universities were immediately founded at Paris, Lille, Lyons, Angers and Toulouse. That at Paris replaced the *Ecole des Hautes-Etudes Ecclésiastiques* which occupied the historic convent *des Carmes*. The Act of March 18th, 1880, however, suppressed the mixed juries and withdrew the title of university from the voluntary institutions of higher education. Since that time they have had to content themselves with the more modest title of *instituts catholiques* or *facultés libres*. It is to be observed that, since the enforcement of the Act for the separation of Church and State (1906), the *grands séminaires*, which formed in each diocese the training-ground for the clergy, have had to be reorganised as higher schools of theology in accordance with the Act of 1875. The *petits séminaires*, for their part, deprived of their peculiar position, have only been able to maintain themselves or reopen by conforming to the Act of 1850, the *loi Falloux*.

The Period of Restriction : 1880–1904

The impartial historian must record the restrictions imposed on freedom of teaching and on the maintenance of voluntary schools

by successive laws and decrees passed since the year 1880. The decrees of March 20th, 1880, closed all secondary schools controlled by non-authorised religious persons. Twenty years later, the Act of July 1st, 1901, repeated the process, and in 1904 a new Act withdrew the right of teaching from all religious persons who had enjoyed it, as the *Frères des Ecoles Chrétiennes* had done, for nearly a century. In law, there no longer exist in France any of those convent schools which are so numerous in England. The only institutions that survive are missionary institutions operating in colonies, protectorates and in foreign countries.

The Present Position

It has been necessary to trace this historical development in order to make clear the legal basis on which the Catholic voluntary school system rests. It is based, not on some benevolent concession, but on a legal right which is still in force. The law of February 27th, 1880, provides that four representatives of this voluntary school system, nominated by the President of the Republic, shall sit on the Higher Council of Public Instruction. In each department, two members elected by these same schools are attached to the Departmental Council presided over by the Academy Inspector, to take part in the regulation of matters affecting private education. The State has reserved to itself authority over the grading of education, and possesses also the right of inspecting voluntary colleges and schools. Its inspectors supervise the selection of textbooks and the moral and sanitary condition of the schools, and they have access also to the registers. This right of inspection has generally been exercised with tact and broad-mindedness.

Under the Act of 1850, the voluntary institutions may receive from the State, and from the departments and communes, a subvention equal to one-tenth of their annual expenditure, subject to the approval of the Academic Council. Further, subject to the approval of the Minister of Public Instruction, these same institutions may receive national scholarships, though, in fact, none have been granted. Since the late war, the families of the *pupilles de la nation*, i.e. sons of soldiers killed or wounded in the war, may, under certain conditions, require that these children shall be educated in voluntary schools. Finally, departments and municipalities may grant free school equipment to indigent children in private as well as in public schools.

II. The Structure of the Voluntary School System

Since Catholic education has been freed from restrictions, how has it been organised in France ?

Organising Bodies

Its principles are those of the Catholic Church which now comprises ninety dioceses in France (including Algeria). In Paris, in

the *Conseil Central de l'Action Catholique*, the *Comité National de l'Enseignement* now acts as the centre of information and the connecting link between the scholastic institutions of the different dioceses. In theory, there is in each diocese a diocesan director of voluntary education, who is appointed by the bishop and who has the right of inspecting the different voluntary schools in the diocese. In this task he is often assisted by one or more inspectors. Diocesan directors and inspectors form an association with a standing committee at its head, which holds regular general conferences in Paris.

Catholic educational policy is also co-ordinated by other associations: the *Fédération Nationale des Syndicats diocésains d'Enseignement Libre*; the important *Syndicat de l'Enseignement Libre* (higher, secondary and technical); and the *Société Générale d'Education et d'Enseignement* which has been in existence for nearly three-quarters of a century. Special mention must be made of the *Alliance des Maisons d'Education Chrétienne*, which has been established for over fifty years. It holds annual conferences, attended by hundreds of directors and professors of voluntary secondary education, at which all questions of education and teaching methods are discussed. For example, at its last conference (Angers, 1932), the questions of sport and of modern educational trends were discussed. The *Alliance* is, at the same time, a corporation including 610 institutions for boys in France and about a hundred in other countries, in addition to some hundreds of institutions of the *Union Féminine*. The *Alliance* forms a powerful group of more than 1,100 institutions of secondary education in the various French-speaking countries (Belgium, French-Switzerland, Canada, Syria, etc.). It publishes journals (*Enseignement Chrétien*, *Studia*) and edits (*librairie J. de Gigord, Paris*) a large collection of classical works.

There are also a number of general or district associations, formed in connection with the Catholic schools: the *Fédération des Amicales*, an old students' association with a membership of some 300,000, in seventeen areas, and the associations of masters, mistresses and supporters of voluntary education which are to be found in many dioceses. Each of these publishes its magazine or bulletin, in addition to the *Bulletin de l'Enseignement Libre*, published in many dioceses, and the review "*l'Ecole*," published in Paris.

The Teacher and the Parent

Special mention must be made of the Associations of Parents of Pupils at Voluntary Schools (known as the A.P.E.L.), which are becoming more and more numerous and which give their sympathy, collaboration and support to the governing bodies of schools and colleges. It should be noted that teachers in Catholic schools have always regarded themselves as the agents of the parents, who are the persons naturally responsible for the education and instruction of their children. The authority of the teacher is thus conceived as a delegation from, and an extension of, parental authority, not as a devolution of the jurisdiction of the State.

Curriculum

In France to-day the voluntary schools can hardly aspire to originality or independence in their curriculum. They are, no doubt, free to organise their teaching and to fix their time-tables as they wish. They can even establish their own examinations and award their own certificates, which, even if they have no official value, deserve none the less the recognition of those who appreciate the difficulty of the tests involved. But in practice, the voluntary school, especially the secondary school, is usually obliged to follow the curricula of the State university, as the only ones which are recognised for diplomas and for entry into the professions, and are therefore demanded by parents. Nevertheless, in spite of the present unpopularity of such studies, Catholic voluntary schools allot as large a place in their curriculum as possible to the classical humanities, and give, what is indeed their peculiar function, religious teaching in all classes.

The voluntary primary and technical schools have been more free to institute their own diplomas, certificates and *brevets*. Above all, Catholic institutions have organised, in accordance with the internal regulations of the Church, those branches of higher education (philosophy, theology and canon law) which, except at Strasbourg, do not find a place in the State universities.

III. Results

Finally, what are the results of this system of voluntary education, and, especially, what services has it rendered ?

The Five Institutes of Higher Education

Limits of space forbid a detailed account of the services rendered to civilisation, despite their lack of funds, by our five Catholic Institutes. Suffice it to quote here, for the Catholic Institute of Paris, the well-known names of its founder, Mgr. d'Hulst, the great geologist, A. de Lapparent, Abbé Rousselot, the introducer of experimental phonetics, and de Branly, the pioneer of wireless telegraphy. Until recently, René Bazin, the academician and popular novelist, taught at the Institute of Angers. The Catholic Institute of Lille, founded and maintained by the industrialists of northern France, has affiliated to it a number of Higher Schools of Commerce, Industry and Social and Political Science, as well as a Department of Journalism and a marine laboratory. Moreover, the Catholic Institutes have not only been the training centres for the male staffs of voluntary schools ; they were also the first to admit women to higher education. The *Union Feminine de l'Enseignement Secondaire Libre* already numbers a thousand qualified and certificated teachers, and a hundred graduates and doctors. It is interesting to note the keenness with which girls take up Latin ; there are 16,564 Latin scholars in Catholic schools.

Technical Education

Further, it was in the voluntary schools maintained by religious orders that technical education, commercial and agricultural, was first organised. These orders also founded the first adult education courses, designed to meet the needs of students who have left school, and the first apprenticeship courses. There are important agricultural institutes at Beauvais, Angers and in the neighbourhood of Toulouse. There are innumerable courses of domestic science for girls.

Teaching Staff

An emphatic tribute should be paid here to the self-sacrifice shown by the teachers in Catholic schools, especially in these days of economic crisis. True, an organised effort has been made to secure for these devoted men and women decent salaries and even retiring pensions, but the pay of many is still inadequate. French Catholics, as has often been pointed out, contribute twice over towards education, once towards the State schools and again towards their own. In spite of this heavy burden, added to the other burdens involved in the maintenance of public worship and manifold charitable works, they have tried, with success, to raise the funds necessary to realise, in part, the ideal of free secondary education, by the award of scholarships, preferably to large families.[1] In spite of the shortage of candidates for the priesthood, which is now fortunately becoming less acute, a substantial proportion of the clergy are employed in the schools. One-third are so employed in some dioceses, 473 in the Département du Nord alone, while the four dioceses of Brittany have nearly 260 teaching priests. In the words of Mgr. Dadolle, once Bishop of Dijon, " the Church has more need of schools than of cathedrals."

Statistics

The following facts will give some idea of the strength of the Catholic schools in France. Maintained, as they are, solely by voluntary effort, without any assistance from public funds, to which, on the contrary, their supporters contribute by means of heavy taxation, the Church obviously cannot hope to gather under her care the majority of the youth of France. Between 1880 and 1900, as a result of the legislation which suppressed religious teaching in the State schools, French Catholics made a great effort. The number of voluntary primary schools increased to 17,348, with 1,377,578 pupils. The voluntary secondary schools (*collèges*) numbered 91,000 pupils, a larger number than in the State institutions. But the laws of 1901 and 1904, already referred to above, led to the closing of 14,000 private schools, according to a statement made to Parliament on February 24th, 1911.

[1] Unlike the State secondary schools, voluntary secondary schools continue to charge fees.

According to recent estimates, the statistics of voluntary institutions are as follows :

1. *Higher Education*

In the five Catholic Institutes : 400 teachers and nearly 5,000 students. The students of about a hundred *grands seminaires* and missionary training institutions should be added to these figures.

2. *Secondary Education*

Number of Schools (Boys and Girls)	825
Number of Teachers	12,216
Number of Pupils	150,000

3. *Primary Education*

Number of Schools	11,000
Number of Teachers	31,870
Number of Pupils (599,000 girls and 256,000 boys) .	855,000

To these figures should be added 429 higher primary schools, 72 teacher training schools, 288 technical schools, 623 orphanage schools, and several hundred infant schools and nurseries.

The denominational Catholic schools of Alsace-Lorraine are not included in these figures.

In all, the Catholic Church in France bears the cost of about 15,000 schools and colleges, and of about 1,100,000 pupils, without any assistance from public funds.

Geographical Distribution of Voluntary Schools

We can only indicate briefly the geographical distribution of voluntary schools in France. For example, the diocese of Paris, where the conditions are exceptional, has the largest number of pupils in its secondary schools : 25,700, as compared with 45,469 in its primary schools. It is outdistanced in the latter sphere by the diocese of Lyon, which has 51,000 pupils in its primary schools, or one-third of the total school population, instead of the usual proportion of a quarter or a fifth, and consequently has to meet an annual expenditure of 10 million francs. Just next door, the poor and mountainous diocese of Viviers (containing 224,000 Catholics) has assumed responsibility for 349 voluntary schools and 112 infant schools. The two departments of the Nord and the Pas de Calais maintain 727 primary voluntary schools, containing 80,000 pupils, not including 56 secondary and many technical institutions. Finally, in the seven western dioceses (Brittany, Anjou, Vendée) the voluntary schools contain the majority of the primary school population, as many as 239,142. It must be remembered that, in other districts in France, it is only the more important centres of population which possess voluntary schools, or (say) about twenty or thirty in each diocese. Further, even in the best districts, the voluntary schools for boys, through lack of staff, are far less numerous than those for girls (3,000 as against 8,000).

Character of the Catholic Secondary School

In conclusion, let us suppose that an English secondary schoolboy were to visit one of our great voluntary institutions, such as he might find situated in wooded grounds in the Ile de France or in Touraine. He would find himself more at home in it than almost anywhere else in France. He would find a chapel open for prayer and matins as on the other side of the Channel. On the playing-fields he would find keen football, tennis and cricket teams, and he might be told that it was at the voluntary *collège*, at Arcueil that the celebrated Father Didon brought the influence of sport to bear on education for the first time in France. Such a schoolboy would also find among his French fellow-scholars a great enthusiasm for another importation from his native country, the Scout movement. He would begin to understand that the Church not merely aims at the spiritual development of her pupils, though that remains her essential task, but also gives to them the practical training and the education in the use of leisure which they require. In a word, her ideal of education remains that of Christian humanism—to take all that is highest and best in the inheritance handed down to us from past centuries, and to bring to bear upon it the purifying and pervading power of the Gospel. This ideal of the voluntary schools of France, at once traditional and modern, should surely be appreciated in England, where so many celebrated schools hand on the traditions of the past while preparing for a life of action those who will be the men of to-morrow.

CH. AIMOND.

INDEX

The following abbreviations are used throughout this Subject Index.

I.F.S.	=	Irish Free State
L.E.A.	=	Local Education Authority
N.Z.	=	New Zealand
N.I.	=	Northern Ireland
P.E.S.	=	Public Elementary School
S.A.	=	South Africa
U.S.A.	=	United States of America
U.S.S.R.	=	Union of Soviet Socialist Republics

N.B.—All entries refer to England and Wales unless otherwise stated. The reference "Foreign Countries" covers the countries dealt with in Part I, Section II.

A

ABYSSINIA (Ethiopia), educational system of, 131

ACCOMMODATION, SCHOOL, elementary, L.E.A.'s duty to provide, 22–23; *Scotland*, elementary, legal notes, 259–260

ADMINISTRATION, Education, of, cost of, university, 186; non-university, 189, 191; legal notes, 245–254; system of, 21–27; *Australia*, 14, 91, 306–308, 322–324; *Austria*, 881–882; *Canada*, 287–289; *Central European Countries*, 124–126; *Far Eastern Countries*, 128–129; *Finland*, 923–924; *Foreign Countries* (see under each country for specific pages), 130–168; *India, British*, 110, Mysore, 818–819, States, 110–111; *I.F.S.*, 106–107; *Jamaica*, 866–867; *Latin Countries*, 122–124; *Malaya*, 832; *Moslem Countries*, 127–128; *N.Z.*, 14, 99, 333; *N.I.*, cost of, 243; *Scandinavia*, 126; *Scotland*, 61–65, universities, cost of, 205; *S.A.*, 16, 101–102, 334–336, universities, 754; *Spain*, 899–900; *U.S.A.*, 116–120, 368–376; *U.S.S.R.*, 126–127

ADULT EDUCATION, dynamics of, 657–667; general, 652–655; statistics, 43; *Finland*, 920–921; *Foreign Countries* (see under each country for specific pages), 130–168; *Jamaica*, 868; *Newfoundland*, 358; *Spain*, 906; *U.S.A.*, 381; *U.S.S.R.*, 127

ADULT SCHOOL UNION, 652–655

ADVANCED COURSES, Secondary Schools, statistics, 52; classics, 412; Natural Science, 444; Mathematics, 452–458; Geography, 478–479; Domestic Studies, 503–504; *Scotland*, 524–525, 529–533, 545–546

ADVISORY COMMITTEES, composition and functions of, 26–27

AFRICA, SOUTH, UNION OF, see South Africa

AFRICA, TROPICAL, textbooks, 714–718

AGE, SCHOOL, see also Attendance, Compulsory; legal notes, 22, 249; *Scotland*, legal notes, 60, 259; *N.I.*, legal notes, 79

AGRICULTURAL EDUCATION, see also Rural Education, statistics, 55, cost, 190; *Malaya*, 850

AID, STUDENTS, to, 41, 187–188; *Scotland*, 74

ALASKA, native education, 121

ALBANIA, general, 130–131

ALBERTA, general, 554–555; religious instruction, 17; statistics, 90; textbooks, 695

ALGERIA, *medressa*, 19

ALIGARH MOVEMENT, India, 809–812

ALLIANCE DES MAISONS D'EDUCATION CHRÉTIENNE, France, function of, 931

AMERICA, UNITED STATES OF, see United States of America

APPRENTICESHIP ACT, I.F.S., 351

APPROVED SCHOOLS, administration, 21, legal notes, 252–253; *Scotland*, finance, 216, legal notes, 262

ARBEITERMITTELSCHULE, Austria, 884

ARGENTINE, general, 130, 132
ART SCHOOLS, statistics, 29, 31, 49, 54; *I.F.S.*, statistics, 109
ASSAM, textbooks, 705–706
ATHLETICS, general, 515
ATTENDANCE, average, P.E.S., by type of school, 45; *N.I.*, P.E.S., 85
ATTENDANCE, COMPULSORY, legal notes, 22, 249–250; *Australia*, 91; *Austria*, 873; *British Commonwealth of Nations*, comparative diagram, 169, 172–173; *Europe*, comparative diagrams, 169, 172–173; *Finland*, 917–918; *Foreign Countries* (see under each country for specific pages), 130–168; *India, British*, 110–111; *Punjab*, 791; *I.F.S.*, 107; *Jamaica*, 863; *Malaya*, 836; *N.Z.*, 99, 331; *N.I.*, 79; *Scotland*, 59–60, 259–260; *S.A.*, 101–102; *Spain*, 898; *U.S.A.*, 116
AUFBAUSCHULEN, Austria, 884
AUSTRALIA, comparative diagrams, 169–183; depression, effect on education, 294–325; States, The, notes on, 91–93; religious instruction, 14; textbooks, 699–701
AUSTRIA, general, 132–133, 873–890; comparative diagrams, 169–183
AUTHORITIES, EDUCATION, LOCAL, finance, 185, 188–198, 201–203; legal notes, 247; types, numbers and functions of, 21–27; statistics, elementary, 44; secondary, technical and further, 49; training colleges, 56; *Scotland*, constitution and powers of, 60, 63–65, finance, 211–216, duties, 65–74, powers, transference of, 61; legal notes, 259–267; *N.I.*, finance, 242–244, functions, 78–80

B

BACHILLERATO, Spain, 904, 907
BARBADOS, textbooks, 719
BARODA, textbooks, 713
BELGIUM, comparative diagrams, 169–182; general, 130, 134–135
BENGAL, textbooks, 706
BERMUDA, textbooks, 719
BIHAR AND ORISSA, textbooks, 706–707
BILINGUALISM, *Malaya*, 837–839; *Netherlands East Indies and Indo-China*, 854–855; *S.A.*, 773–775
BIOLOGY, see Natural Science
BLACK-LISTED SCHOOLS, statistics, 270
BLIND CHILDREN, education of, statistics, 58; legal notes, 250; *Scotland*, legal notes, 260–261
BOARD OF EDUCATION, establishment of, 21; powers and duties of, 21–27; finance, 184–191, 196–198, 199–200; grant regulations, 25–26; legal notes, 246–247
BOARD OF EDUCATION ACT, 1899, 21
BOLIVIA, general, 130, 135
BOMBAY RESIDENCY, textbooks, 707–708
BOOKS, SCHOOL, see Textbooks
BOROUGHS, COUNTY (see also Education Authorities, Local), number of, 21; higher education, duties regarding, 24; statistics, all institutions, 44, 49
BOROUGHS, NON-COUNTY (see also Education Authorities, Local), County Boroughs, powers to become, 22; number of, 21; statistics, 24, 44
BOYS' BRIGADE, 644–645
BOYS' ORGANISATIONS, 644–646
BOY SCOUTS, 516, 634–643; *Malaya* 847; *Newfoundland*, 358
BRAZIL, general, 130, 135–136
BRITISH COLUMBIA, general, 555–556; statistics, all institutions 90; textbooks, 695–696
BRITISH COMMONWEALTH OF NATIONS (see also each country), comparative diagrams, 169–183
BRITISH FILM INSTITUTE, 661
BRITISH GUIANA, textbooks, 718–719
BRITISH HONDURAS, textbooks, 719
BRITISH INSTITUTE OF ADULT EDUCATION, 666–667
BRITISH WEST INDIES, textbooks 719–720
BROADCASTING, adult education 661–664; modern languages, aid to teaching of, 427; secondary schools, music, aid to teaching of 483; *Australia*, 317–318
BUILDINGS, SCHOOL, non-provided regulations regarding, 23; legal notes, 250–251; *Australia*, 297–298; *Canada*, 282–283; *N.I.*, 82
BULGARIA, general, 136–137
BÜRGERSCHULEN, *Austria*, 880; *Central European Countries*, growth of 125
BURGH SCHOOLS, Scotland, general 518–520
BURMA, textbooks, 708
BUSINESS SCHOOLS, U.S.A., statistics, 121

C

CANADA (see also under each Province), comparative diagrams, 171–183; events in education, 281–293; primary-secondary system, rationalisation of, 15; Provinces, school systems of, 547–556; religious instruction, 17; secondary education, survey of, 557–606; statistics, 89–90; technical education, 15–16; textbooks, 695–699; traditions of educational system, 14–15; universities, 17; vocational schools, 20
CAPE PROVINCE, general, 101; schools, grading of, 16; statistics, 101–105; textbooks, 702
CATALONIA, general, 909–910
CENTRAL INSTITUTIONS, Scotland, finance, 207–209; grant regulations, 63; system of, 73–74; statistics, 75
CENTRAL PROVINCES, India, textbooks, 710
CENTRAL SCHOOLS, selective, general, 33
CENTRALLY ADMINISTERED AREAS, India, textbooks, 709–710
CEYLON, English influence in, 18; textbooks, 720–721
CHARITABLE TRUSTS, legal notes, 254–258
CHURCH LADS' BRIGADE, 644–645
CHEMISTRY, see Natural Science
CHILDREN AND YOUNG PERSONS' ACT, 1933, legal notes, 252–253; *Scotland*, legal notes, 259, 266–267
CHILDREN, EMPLOYMENT OF, legal notes, 252; *Scotland*, legal notes, 266–267
CHILE, general, 137
CHINA, education, traditions of, 20; general, 128, 138
CHURCH OF ENGLAND EDUCATION, statistics, 40, 45
CITY AND GUILDS OF LONDON INSTITUTE, cotton industry, courses for, 672–673
CLASSES, P.E.S., statistics, 44, 46, 47; secondary schools, 25, 51; *Austria*, 882–883; *Scotland*, regulations, 66–67
CLASSICS, The, secondary schools, survey of, 402–416
CLOTHING, provision of, Scotland, legal notes, 261–263
CODE SCHOOLS, Scotland, general, 523–525
CO-EDUCATION, *Foreign Countries* (see under each country for specific pages), 130–168; *Austria*, 885; *U.S.S.R.*, 127
COLLÈGES, Latin Countries, type of, 123
COLLEGES, U.S.A., age range, 117; comparative diagram, 179; statistics, 121
COLOMBIA, general, 130, 138–139
COLOURED PEOPLE, S.A., education of, statistics, 102, 105
COMITÉ NATIONALE DE L'ENSEIGNEMENT, France, function of, 931
COMMERCIAL EDUCATION, central schools, selective, bias towards, 33; *U.S.A.*, business schools, 121
COMMON ENTRANCE EXAMINATION, subjects of, 34
CONSEIL CENTRAL DE L'ACTION CATHOLIQUE, France, function of, 931
CONTINUATION CLASSES, DAY, statistics, 14–15, 30; *Scotland*, regulations, code of, 62–63, statistics, 75, system of, 73–74
CONTINUATION SCHOOLS, DAY, definition, 30; part-time regulations, 24; statistics, 49, 54; *Austria*, fortbildungschulen, 887–888
CORPORAL PUNISHMENT, legal notes, 250
CORRESPONDENCE COURSES, Agriculture, 55; *Canada*, 285, 289–290
CORRESPONDENCE SCHOOLS, Australia, Queensland, statistics, 98
COSTA RICA, general, 130, 139
COTTON INDUSTRY, education for, 668–684
COUNTY COUNCILS (see also Education Authorities, Local), higher education, duties regarding, 24; number of, 21; statistics, all institutions, 44, 49
CRAFTS, see Practical Subjects
CUBA, general, 130, 139–140
CURRICULUM, cotton industry, education for, 672–673; junior instruction centres, 650-651; P.E.S. regulations, 25, 278; secondary schools, for specific subjects, see under; regulations, 25; criticism of, 387–388; training colleges, regulations, 25; *Scotland*, elementary, 65, advanced divisions, 70; continuation classes, 73, lower and higher certificates, 72; secondary schools, 71; religious education, 727–728; *Austria*, ele-

mentary, 883, secondary, 883–884; *Canada*, secondary, 569–573; *Finland*, elementary, 918; *France*, voluntary schools, 932; *Latin Countries*, 123–124; *N.I.*, elementary, 81, secondary, 83; *India*, Mysore, universities, 822; *Malaya*, primary and secondary, 844–846; *Spain*, primary, 905, secondary, 907–908; *U.S.A.*, economic depression, effect on, 376–377
CYPRUS, Greek influence in, 18; textbooks, 721–722
CZECHOSLOVAKIA, comparative diagrams, 169–182; general, 140–141

D

DANCING, general, 516
DAY CONTINUATION CLASSES, statistics, 43
DAY SCHOOLS, regulations for, Code of, Scotland, elementary, 62–63
DEAF CHILDREN, education of, statistics, 58; *Scotland*, legal notes, 260–261
DENMARK, comparative diagrams, 169–182; general, 141
DENTAL TREATMENT, statistics, 58
DEPRESSED CLASSES, India, Mysore, 825
DIRECT METHOD, language teaching, survey of, 418–419
DOMESTIC SUBJECTS, general, 495–507; statistics, 47, 56; *Australia*, 92–93
DOMINICAN REPUBLIC, general, 142

E

EAST SUFFOLK AREA SCHOOLS, 629–630
ECCLESIASTICAL PRIMARY SCHOOLS, Finland, 920
ECONOMY MEASURES, effect of, 268–274; *Australia*, 294–311; *Canada*, 281–293; *India, British*, 359–360; *Newfoundland*, 357–358; *S.A.*, 337; *U.S.A.*, 368–382
ECUADOR, general, 130, 142
EDUCATIONAL SYSTEMS, *English-speaking nations*, 11–121, 169–183; *Foreign Countries*, 122–183
EDUCATION ACT (CONSOLIDATED), 1921, 21; amendments, 245; *N.I.*, 1923 and 1930, 78
EDUCATION (SCOTLAND) ACT, 1872, 59, 65; 1878, 59; 1908, 59–60; 1918, 60–61
EDUCATIONAL MISSIONS, Spain, 906
EDUCATION COMMITTEES, authority and functions of, 27; membership, disqualifications for, 251; *Scotland*, constitution and powers of, 64–65
EDUCATION (INSTITUTION CHILDREN) ACT, 1923, 251
EDUCATION (SCOTLAND) FUND, 206–211
EDUCATIONAL SETTLEMENTS ASSOCIATION, 652–653
EGYPT, general, 142–143
EINHEITSSCHULEN, Austria, 878–880
ELEMENTARY EDUCATION, see also Primary; administration, 21–24; definition of, 22; curriculum, 25; free place examinations, 32–33; departments, statistics, 28, 44, 45; finance, 188–198; cost per pupil, 44; historical development, 11–12; music, P.E.S., teaching in, 731–741; practical subjects, P.E.S., teaching of, 486–491; legal notes, 247–251; pupils, by age range, 42–43; reorganisation, P.E.S., problems of, 274–278; secondary, ex-P.E.S. output to, 51; statistics, 42–48; universities, ex-P.E.S. pupils, number of, 51; provided and non-provided schools, definitions of, 23; school medical service, 58; *Australia*, historical developments, 13–14; *Austria*, old system, 873–874, period of reform, 875–877, present system, 882–883; *Canada*, grading, 14–16, provincial systems, 547–556, statistics, 89–90; *Jamaica*, 862–864, 869–870; *Malaya*, 844–846; *N.I.*, finance, 241–243, organisation, 79–80, recent events, 279–280, statistics, 86, system, 80–82; *S.A.*, grading, 16, statistics, 104–105; *Scotland*, administration, 61–65; historical development, 12–13; finance, survey of, 218–239; religious instruction, 728; statistics, 75–76; system of, 65–71; *U.S.A.*, age range, 117; enrolment, 371–372; statistics, 120–121
"ELEVEN-EIGHTIETHS," see "Goschen" Formula
ENDOWED SCHOOLS, legal notes, 254–258

ENDOWMENTS, universities, 185; *Scotland*, 216–217; legal notes, 264
ENGINEERING, secondary schools, Northern Universities, Joint Board, syllabus, 493
ENGLAND AND WALES, administrative system, 21–27; adult education, 657–667; Boy Scout movement, 634–643; cotton industry, education for, 668–684; educational system, 28–41; British Commonwealth of Nations, influence on, 11–20; education outside the schools, 644–656; education, recent events in, 268–278; comparative diagrams, 169–183; finance, 184–203; governing enactments, 21; legal notes, 245–258; music, elementary schools, teaching in, 731–741; secondary education, survey of, 383–517; schools, re-planning of, 619–633; textbooks, selection and supply of, 687–694; statistics, 42–48
ENROLMENT, P.E.S., 46; secondary schools, 50; *Australia*, all institutions, 93–98; *Canada*, elementary and secondary, 547–556; *India, British*, all institutions, 364, 366; *N.I.*, all institutions, 85–86; *N.Z.*, university, 327; *Scotland*, all institutions, 75; twelve years' survey, all institutions, 231; *U.S.A.*, all institutions, 121; elementary and secondary, 371–372
ESTONIA, general, 143–144
EUROPE (see also under each country), comparative diagrams, 169–183; educational systems, central types, 124–126, Latin types, 122–124, Scandinavian types, 126, Soviet Federation, 126–127
EVENING EDUCATION, agricultural, 55; pupils, total number of, 43; statistics, 30, 49, 54, 55; technical, 39; *Scotland*, extra-mural, 77
EXAMINATIONS (see also under each examination), elementary schools; secondary and training colleges, regulations regarding, 26; first and second examinations, administration, 26, survey, 37–38; free place, regulations, 32, survey, 623–624, syllabus, 33; common entrance, compulsory subjects, 34; cotton industry, 672–673; intermediate schools, Sheffield, school certificate successes in, 629; secondary school examinations, administration of, 37; *Australia*, 316–317, 322; *Austria*, lehramtsprufung, 889, maturitätsprüfung, 875, reifeprüfung, 884, reifezeugnis, 885; *Canada*, 291–292; *Central European Countries*, 125; *Far Eastern Countries*, 128; *Foreign Countries* (see under each country for specific pages), 130–168; *Latin Countries*, 123; *Moslem Countries*, 128; *Malaya*, 846–847; *N.I.*, elementary, 81, secondary, 82–83; *N.Z.*, 328–329; *Scandinavia*, 126; *Scotland*, 72–73, leaving certificates, 526–528, higher certificates, 531–532; *Spain*, bachillerato, 904, 907; *U.S.A.*, 609–610; *U.S.S.R.*, 127

F

FACHSCHULEN, Austria, 886–887
FARM INSTITUTES, statistics, 55
FARMERS' CLUBS, Australia, 312–314
FEDERAL BOARDING SCHOOLS, Austria, 886
FÉDÉRATION NATIONALE DES SYNDICATS DIOCÉSAINS D'ENSEIGNEMENT LIBRE, France, function of, 931
FEDERATION OF WORKING GIRLS' CLUBS, 645–646
FEES, SCHOOL, junior technical schools, 32; P.E.S., regulations, 24, 247; preparatory schools, 35; public schools, 35; secondary schools, 31; universities, 184; *Australia*, secondary, 300–301; *Austria*, secondary, 885–886; *N.I.*, secondary, 82; *S.A.*, universities, 761–762
FEMALES, education of, all institutions, 40–58; *India, British*, statistics, all institutions, 112, Mysore, 824, the Punjab, 786–788; *Latin Countries*, 123, *N.I.*, statistics, all institutions, 85–86
FIJ., textbooks, 722
FILMS, adult education, use in, 661–664
FINANCE, depression, general effects on, 268–272; general, 184–198; local expenditure, two reports on, 269; capital expenditure, reduction in, 270; survey, eleven years' expenditure, 199–203; junior instruction centres, cost of, 648–649; *Australia*, 294–311;

British Commonwealth of Nations, comparative diagram, 171 ; *Canada*, general, 281–287 ; secondary education, 561–563, 602 ; *Europe*, comparative diagram, 171 ; *Far Eastern Countries*, 128 ; *Foreign Countries* (see also under each country for specific pages), 130–168 ; *India*, general, 359–360, Mysore, primary, 819, by Provinces, 113, by States, 113 ; *I.F.S.*, 109 ; *Jamaica*, 867 ; *Latin Countries*, 122 ; *Moslem Countries*, 128 ; *Malaya*, 832–836 ; *N.I.*, 240–244 ; *Newfoundland*, 357 ; *N.Z.*, university, 326–327 ; *S.A.*, 103, 336–341, university, 754–757 ; *Scandinavia*, 126 ; *Scotland*, 204–239 ; *U.S.A.*, 120, 368–376
FINLAND, general, 144, 911–926
FIRST EXAMINATION, administration, 26 ; curriculum, 36, 37–38 ; statistics, 36, 52
FOLK HIGH SCHOOLS, Finland, 920
FORTBILDUNGSSCHULEN, Austria, 875, 887–888
FOUNDATION SCHOOLS, classes by number and size, 51
FOUNDATIONS, EDUCATIONAL, legal notes, 254–258
FRANCE, Catholic schools, 927–935 ; colonial education, policy of, 19 ; comparative diagrams, 169–182 ; general, 130, 145–146
FRAUENOBERSCHULEN, Austria, 885
FREE EDUCATION, elementary, 247 ; secondary, 32, 52 ; universities, 51 ; *Australia*, 91 ; *Foreign Countries* (see also under each country for specific pages), 130–168 ; *N.Z.*, primary, 99, secondary, 14, 99 ; *S.A.*, primary and secondary, 101–102 ; *Spain*, 898
FREE PLACE EXAMINATION, 32–33, 623–624
FRENCH, teaching of, secondary schools, 420–428
FURTHER EDUCATION, see also Technical Education ; definition of, 25 ; education authorities, local, duties to provide, 22 ; technical, other than, survey of, 40 ; statistics, 30, 49, 54 ; economic depression, effect on, 271

G

GAMES, organised, general, 513–515
GARDENING, P.E.S., provisions for instruction in, 47
GARDENS, SCHOOL, N.I., statistics, 280
GENTILE REFORMS, Italy, 123–124
GEOGRAPHY, teaching of, secondary schools, 469–479
GERMAN LANGUAGE, secondary schools, neglect of, 420
GERMANY, comparative diagrams, 169–183 ; general, 146–147
GINNASI, Italy, German influence, 123
GIRL GUIDES, 516, 645–646
GIRLS' FRIENDLY SOCIETY, 645–646
GIRLS' LIFE BRIGADE, 645–646
GIRLS' ORGANISATIONS, 644–646
" GOSCHEN " FORMULA, definition of, 207
GRAMMAR SCHOOLS, social changes in, 407–408 ; *Australia*, 92
GRAMOPHONES, language teaching, aid to, 427 ; adult education, 661
GRANTS, PARLIAMENTARY, basis of, 191 ; regulations, 25–26 ; finance, 184, 188, 199–200 ; *N.I.*, 82, 240, 241–242, 243–244 ; *Scotland*, Education (Scotland) Fund, 206, 207–211
GREECE, general, 130, 147–148
GRENADA, textbooks, 719–720
GUATEMALA, general, 130, 148–149
GYMNASIA, *Austria*, Old System, 874–875, new system, curricula, 884 ; *Finland*, 912, 914 ; *Scandinavia*, grades of, 126
GYMNASTICS, general, 510–513

H

HAITI, general, 130, 149
HANDICRAFTS, P.E.S., provisions for, statistics, 47
HAUPTSCHULEN, Austria, 880
HEADMASTERS' CONFERENCE, definition, 35 ; schools, members of, 50
HIGH SCHOOLS, *Australia*, statistics, 92–93 ; *India*, *British*, grades, 110, statistics, 111, Mysore, 821 ; *N.Z.*, statistics, 100 ; *S.A.*, statistics, 103–104 ; *U.S.A.*, age range, 117, character of, 15–16, statistics, 120–121
HIGHER EDUCATION, see also Further Education ; administration, 24 ; finance, 194–196 ; legal notes, 250 ; *Austria*, old system, 875, period of reform, 879–880, present system, 886 ; *Foreign Countries* (see also under each country for specific pages), 130–168 ; *Finland*, 924–926 ; *France*, 929, 932 ;

Jamaica, 870–871 ; *Malaya*, 850–851 ; *Moslem Countries*, 127 ; *Scotland*, 529 ; *U.S.A.*, 377–380
HIGHER SCHOOL CERTIFICATE, see Second Examination
HILFSSCHULEN, Austria, 882
HINDU EDUCATION, India, schools, types of, 110 ; statistics, 114–115
HISTORY, teaching of, secondary schools, 459–468
HOCHSCHULEN, Austria, 880, 886
HOLLAND, comparative diagrams, 169–183 ; schools, grading, 125
HOMEWORK, legal note, 250
HONDURAS, BRITISH, general, 130, 149–150
HONG KONG, textbooks, 722
HOUSEWIFERY SCHOOLS, statistics, 54
HUNGARY, general, 150
HYDERABAD, textbooks, 713–714

I

ICELAND, general, 150–151
ILLITERACY, *India*, 791–792, 799–800 ; *U.S.A.*, 120
INDEPENDENT SCHOOLS (see also Private Schools), England and Scotland, positions compared, 13, statistics, 50, universities, entrants from, 37
INDIA, *British*, dual cultures, 19, comparative diagrams, 169–183, general, 110, 359–367, statistics, 111–115, textbooks, 705–708 ; Centrally Administered Areas, textbooks, 709–713 ; *Mysore*, 817–826 ; *Punjab*, the, 782–796 ; *States*, textbooks, 713–714
INDIANS, education of, *Canada*, 87 ; *S.A.*, 102 ; *U.S.A.*, 116, 121
INDO-CHINA, general, 827–857
INDUSTRIAL SCHOOLS, see Approved Schools
INFANT DEPARTMENTS, P.E.S., statistics, 28, 42–44
INSPECTORATE, CENTRAL, finance, 189 ; organisation, 26 ; regulations, 24 ; *Austria*, 881 ; *Finland*, 923 ; *India*, Punjab, 790 ; *N.I.*, organisation, 81 ; *Scotland*, organisation, 59, 63 ; *Spain*, 903–904
INSTITUTE-SCHOOL OF MADRID, 907
INTELLIGENCE TESTS, standardised, some results of, 276 ; *U.S.A.*, new type of, 609–616
INTERMEDIATE EDUCATION, Sheffield type of, 627–629 ; *Austria*, 882–883 ; *Foreign Countries* (see under each country for specific pages), 130–168 ; *N.I.*, finance, 243–244, statistics, 86 ; *Scotland*, 67–69
IRAQ, general, 151
IRISH FREE STATE, administration, 106–109 ; comparative diagrams, 169–183 ; general, 350–356 ; statistics, 109 ; textbooks, 705
IRISH LANGUAGE, I.F.S., general, 351–352
IRISH NATIONAL TEACHERS' ORGANISATION, 107
ITALY, comparative diagrams, 169–183 ; general, 123, 130, 151–152

J

JAMAICA, general, 858–872 ; textbooks, 720
JAPAN, comparative diagrams, 169–183 ; general, 128, 152–153
JEWISH EDUCATION, P.E.S., statistics, 45
JUNIOR COLLEGES, *Canada*, 597–598 ; *U.S.A.*, age range, 117, general, 616–617, statistics, 117
JUNIOR DEPARTMENTS, P.E.S., age range, mental, 276–277, physical, 28 ; statistics, 28, 44
JUNIOR HIGH SCHOOLS, *Canada*, grading, 16 ; *U.S.A.*, age range, 117 ; grading, 16
JUNIOR INSTRUCTION CENTRES, 647–652
JUNIOR SECONDARY SCHOOLS, *Canada*, 596–597
JUNIOR TECHNICAL SCHOOLS, age range, 29 ; aim of, 33 ; cotton industry, place in, 683 ; London and provinces compared, 34 ; statistics, 29, 30, 49 ; *Australia*, 92–93 ; *N.I.*, 84
JUVENILE ORGANISATIONS COMMITTEES, 646–647

K

KENYA, textbooks, 714
KINDERGARTENS, *Australia*, statistics, 91–93 ; *Canada*, statistics, 89 ; *Foreign Countries* (see also under each country for specific pages), 130–168 ; *N.Z.*, general, 331, statistics, 100 ; *U.S.A.*, general, 117, statistics, 120–121
KORAN SCHOOLS, Malaya, 830

L

LAND, acquisition of, legal notes, 250–251
LANGUAGES, medium of instruction of, Foreign Countries (see also under each country for specific pages), 130–168
LATVIA, school grading, 125, general, 153–154
LAW, EDUCATIONAL, Governing Enactments, 21; legal notes, 245–258; *Foreign Countries* (see also under each country for specific pages), 130–168; *Malaya*, 836; *Scotland*, 259–267
LEAVING CERTIFICATES, Scotland, 526–528
LEHRAMTSPRÜFUNG, Austria, 889
LIBERIA, general, 154
LIBRARIES, SCHOOL, Australia, 305
LIECHTENSTEIN, general, 154–155
LITHUANIA, general, 155
LOAN CHARGES, amount of, 189
LOCAL GOVERNMENT (SCOTLAND) ACT, 1929, 61
LOI FALLOUX, THE, France, 928–929
LONDON COUNTY COUNCIL, statistics, all institutions, 44, 49
LUXEMBOURG, 155–156
LYCÉE, Latin countries, type of, 123
LYCEUMS, Finland, 913–914

M

MADRAS PRESIDENCY, textbooks, 710–711
MAES-YR-HAF SETTLEMENT, 653–654
MAHOMEDANS, education of, Mysore, 824–825
MALAYA, English examinations, influence of, 18; general, 827–857
MALTA, textbooks, 722–723
MANAGERS, SCHOOL, legal notes, 23; non-provided, legal notes, 247
MANITOBA, general, 553; statistics, 90; textbooks, 696
MAORIS, education of, general, 99; statistics, 100
MATHEMATICS, teaching of, secondary schools, 446–458
MATURITÄTSPRÜFUNG, Austria, 875
MAURITIUS, textbooks, 723
MEALS, SCHOOL, cost of, 201; *Australia*, 308–310; *N.I.*, 280; *Scotland*, finance, 219, 238, legal notes, 59–60, 261–263
MEDICAL SERVICES, school, administration, 21, finance, 189, legal notes, 250, statistics, 58; *Australia*, 301; *Austria*, 882; *Jamaica*, 860–861; *Malaya*, 847; *Scotland*, finance, 238, legal notes, 59–60, 260–261; *Spain*, 904
MEDRESSA, Algeria, 19
MENTALLY DEFECTIVE CHILDREN, education of, statistics, 58; *Austria*, 882; *Scotland*, legal notes, 260–261; *S.A.*, 101; *U.S.A.*, statistics, 121
MERSEYSIDE SURVEY OF CLASSIFIED OCCUPATIONS, 626–627
MEXICO, general, 130, 156
MIDDLE EDUCATION, India, 110–111
MINISTRY OF LABOUR Training and Instruction Centres, 654–655
MINORITIES, Education of, Austria, 882
MITTELSCHULEN, Austria, 874, 879, 880
MODEL SCHOOLS, I.F.S., definition of, 106
MODERN LANGUAGES, teaching of, secondary schools, problems of, 622–623; survey of, 417–428
MOSLEM EDUCATION, *India*, Osmania University, 19, schools, types of, 110, statistics, 114–115; *Moslem Countries*, education in, general, 127–128
MUSEUMS, administration, 27; finance, 191
MUSIC, teaching of, elementary schools, 731–741; secondary schools, 480–484; *India*, Mysore, 826
MUSLIM EDUCATION, India, 797–816
MYSORE, India, general, 817–826; textbooks, 714

N

NATAL, general, 102; statistics, 102–105; textbooks, 702–703
NATIONAL ASSOCIATION OF BOYS' CLUBS, 644–645
NATIONAL ASSOCIATION OF HEAD TEACHERS, membership, 48
NATIONAL ASSOCIATION OF SCHOOLMASTERS, membership, 48
NATIONAL CERTIFICATES, evening classes, 39–40
NATIONAL COUNCIL for Domestic Studies, 506
NATIONAL COUNCIL of Girls' Clubs, 645–646
NATIONAL COUNCIL of Social Service, 654

NATIONAL FEDERATION of Class Teachers, membership, 48
NATIONAL UNION of Teachers, membership, 48
NATIONAL UNION of Women Teachers, estimated membership, 48
NATIVE EDUCATION, general separate development, problem of, 20; *N.Z.*, 99; *S.A.*, general, 348, statistics, 102, 105; *U.S.A.*, Alaska, statistics, 121
NATURAL SCIENCE, teaching of, secondary schools, 429–445
NAUTICAL SCHOOLS, statistics, 54
"NECESSITOUS" AREAS, Scotland, special grant for, 213
NEGROES, education of, *Jamaica*, 858–860; *U.S.A.*, education, Southern States, effect on, 119
NETHERLANDS, general, 157
NETHERLANDS EAST INDIES, general, 827–857
NEW BRUNSWICK, general, 548–549; superior schools, grading, 16; statistics, 90
NEWFOUNDLAND, general, 18, 357–358; textbooks, 704
NEW SOUTH WALES, general, 91; statistics, 93–94; textbooks, 699
NEW ZEALAND, comparative diagrams, 169–183; general, 13–14, 99; recent events, 326–333; religious instruction, 14; statistics, 100; textbooks, 701–702
NICARAGUA, general, 130, 158
NIGERIA, textbooks, 714–715
"NON-PROVIDED" schools, legal notes, 23, 247–248
NORMAL SCHOOLS, see also Training Colleges; *Austria*, 888–889; *Canada*, 15; *S.A.*, Transvaal experiment in, 344–346; *Spain*, 904; *U.S.A.*, statistics, 121
NORTHERN IRELAND, administration, 78–80; comparative diagrams, 169–183; finance, 240–244; governing enactments, 78; recent events, 279–280; school system, 80–84; statistics, 85–86; textbooks, 694–695
NORTHERN RHODESIA, textbooks, 715
NORTH-WEST FRONTIER PROVINCE, India, textbooks, 711
NORTH-WEST TERRITORY, Canada, general, 87–88
NORWAY, comparative diagrams, 168–182; general, 158–159
NOVA SCOTIA, general, 547–548; statistics, 14, 90; textbooks, 696
NURSERY SCHOOLS, statistics, 28–29, 58; *Scotland*, legal notes, 60, 66
NYASALAND PROTECTORATE, textbooks, 715

O

OBERSCHULEN, Allgemeinbildende, Austria, 879
OBERSCHULEN, Deutsche, Austria, 880
OCCUPATION CENTRES, 654
OCCUPATIONS, classified, Merseyside, survey of, 626–7
"OLD-SCHOLARS" CLUBS, 652
"OMNIBUS" SCHOOL, Scotland, 540–542
ONTARIO, general, 551–553; religious instruction, 17; textbooks, 698
OPEN-AIR SCHOOLS, statistics, 58
ORANGE FREE STATE, general, 102; school grading, 16; statistics, 102–105; textbooks, 703–704

P

PALESTINE, textbooks, 723; British administration, aim of, 19
PANAMA, general, 130, 159
PARAGUAY, general, 130, 159–160
PARENTS, compulsory education, duties regarding, 22; definition of, 249; legal notes, 249–250; *Australia*, associations of, 318; *France*, teachers' relationship to, 931; *Finland*, Councils of, 923; *Scotland*, compulsory education, duties regarding, 59; legal notes, 259
PARISH SCHOOLS, *Canada*, Maritime Provinces, 14; *Scotland*, general, 518–520
PENSIONS, TEACHERS', administration of, 192; finance, 188, 189; legal notes, 253–254; *N.I.*, finance, 244; *Scotland*, finance, 209–210, 227–229
PERSIA, general, 160
PERU, general, 160
PHYSICAL EDUCATION, general, 508–517; statistics, 58; *India*, Mysore, 826
PHYSICALLY DEFECTIVE CHILDREN, education of, statistics, 29, 58; *Scotland*, legal notes, 260–261; *S.A.*, 101; *U.S.A.*, statistics, 121
PHYSICS, see Natural Science

POLAND, comparative diagrams, 169–182; general, 161
POOR LAW SCHOOLS, general, 28; legal notes, 251; statistics, 42
POPULATION, decline in, 272–273; statistics, by age groups, 42–43; *Australia*, by States, 91–93; *Canada*, 90, by Provinces, 547–555, Yukon and N.W. Territory, 87; *Foreign Countries* (see under each country for specific pages), 131–168
PORTUGAL, general, 161–162
POST-PRIMARY EDUCATION (see also Secondary and Technical), secondary education, relation to, 396–397; *Australia*, general, 91–93, statistics, 93–98; *India*, Mysore, 820–821; *N.Z.*, statistics, 100
PRACTICAL INSTRUCTION, P.E.S., regulations, 22, central and senior schools, 33, statistics, 47; secondary schools, 485–494; *Scotland*, secondary schools, 531
PRE-SCHOOL EDUCATION (see also Nursery Schools), *Australia*, by Provinces, 91–93; *Foreign Countries* (see under each country for specific pages), 130–168; *Scotland*, 65–66
PREPARATORY SCHOOLS, definition of, 34; fees, average, 35; *N.I.*, finance, 243–244, statistics, 86
PRIMARY EDUCATION (see also Elementary Education), *Australia*, curriculum, 314–315, general, 91–93, statistics, 93–98; *British Commonwealth of Nations*, comparative diagrams, 174–175; *Europe*, comparative diagrams, 174–175; *Central Countries*, 125; *Latin Countries*, 123; *Foreign Countries* (see under each country for specific pages), 130–168; *France*, 928, statistics, 934; *India*, Mysore, 819–820, Punjab, 788–789, statistics, all India, 110–111; *I.F.S.*, general, 106–107, statistics, 106, 109; *Moslem Countries*, 127; *N.Z.*, general, 99, 330–332; *S.A.*, statistics, 103–105; *Spain*, general, 900, 902–907
PRINCE EDWARD ISLAND, general, 549, statistics, 14, 90, textbooks, 696–697
PRIVATE SCHOOLS, general, 34–35, 169, 624–625; *Australia*, 91, 93–95; *Austria*, 882, 885; *British Commonwealth of Nations*, comparative diagrams, 174–175; *Europe*, *Central Countries*, 124, comparative diagrams, 174–175, *Scandinavian Countries*, 126; *Far Eastern Countries*, 128; *Finland*, 915–916; *I.F.S.*, 107; *Foreign Countries* (see under each country for specific pages), 130–168; *Jamaica*, 864; *Malaya*, 845; *N.Z.*, 99–100; *Scotland*, 66; *Spain*, 901–902; *U.S.A.*, 121, comparative diagrams, 174–175; *U.S.S.R.*, 127
PROTESTANT EDUCATION (see also under each denomination), *Australia*, New South Wales, 91; *Canada*, Yukon and N.W. Territory, 87; *I.F.S.*, 107; *N.I.*, 80; *Scandinavia*, 126
"PROVIDED" SCHOOLS, definition, 23
PUBLIC SCHOOLS, definition, 34, fees, average, 35; classical studies, preservation of, 406–407; *U.S.A.*, definition, 369
PUNJAB, THE, education in, 782–796; textbooks, 711–712

Q

QUEBEC, general, 549–551; religious instruction, 16; statistics, 90; textbooks, 697
QUEENSLAND, general, 92; statistics, 93, 98; textbooks, 699

R

RATES, finance, 188; legal notes, 27; *Scotland*, finance, 211, 218
REALGYMNASIUM, Austria, 884, 874–875
REALSCHULEN, *Austria*, 874–875, 884; *Central Europe*, growth of, 125
REFORMATORY SCHOOLS, see Approved Schools
REFORMREALGYMNASIUM, Austria, 874–875
REFRESHER COURSES, science teachers, for, 436–437
REGULATIONS, statutory, 246
RELIGIOUS INSTRUCTION, England and Scotland compared, 13; Endowed Schools, legal notes, 255; P.E.S., regulations, 23, statistics, 45; higher education, 24; *Australia*, 14, 91; *British Commonwealth of Nations*, com-

parative diagrams, 174–175; *Belgium*, 122, 124, 130; *Canada*, 17; *Europe*, 130; comparative diagrams, 174–175; *Central Countries*, 124; *Finland*, 917; *Foreign Countries* (see under each country for specific pages), 130–168; *Greece*, 122, 130; *Far Eastern Countries*, 128; *India*, *British*, 110, Muslim, 806, statistics, 114–115, Aligarh Movement, 811–812; *I.F.S.*, 106; *Italy*, 122–124; *Latin Countries*, 122–123; *Moslem Countries*, 128; *N.Z.*, 14, 99; *Newfoundland*, 18; *N.I.*, 78, 80, statistics, 85; *Scotland*, general, 724–730, legal notes, 263–264; *Spain*, 130, 898; *Scandinavia*, 126; *U.S.S.R.*, 127

REORGANISATION OF SCHOOLS, general, 29, 274–278; finance, 189; statistical survey, 28; *Australia*, 14; *N.Z.*, 14, 99; *U.S.A.*, 116–117

RESEARCH, cotton industry, 676–679; *Australia*, educational, Council for, 325; *Scotland*, educational, 546; *S.A.*, University, 778–781

RETARDED CHILDREN, problem of, 274–277

ROMAN CATHOLIC EDUCATION (see also Religious Instruction), statistics, P.E.S., 45; Secondary Schools, 50, 51; Training Colleges, 40; *Australia*, New South Wales, 91; *Canada*, Yukon and N.W. Territory, 87, Provinces, 547–556; *Europe*, Central, 124; *France*, Secondary Schools, 927–935; *I.F.S.*, primary, 106, secondary, 107; *Latin Countries*, 122–123, 130; *Newfoundland*, 18; *N.I.*, elementary, 80, secondary, 83; training colleges, 242; *Scotland*, 59, 724–727

RUMANIA, general, 162

RURAL SCHOOLS (see also Agriculture); *Australia*, general, 312–314, New South Wales, statistics, 94; *Canada*, high schools, 587–589; *N.I.*, "bipartite" system, 81

RUSSIA, see Union of Soviet Socialist Republics

S

SALVADOR, general, 162–163

SANSKRIT LEARNING, Mysore, 824

SASKATCHEWAN, general, 554; religious instruction, 17; rural schools, 15; statistics, 90; textbooks, 698–699

SCANDINAVIA, general, 126

SCHEMES AND PROGRAMMES, Board of Education's powers regarding, 24

SCHOLARSHIPS, agricultural, 55; cotton industry, 673; secondary schools, classical, 406, 408; universities, 57, 186–188; *Australia*, 91; *Jamaica*, 866; *Malaya*, 851; *N.Z.*, 99; *N.I.*, 244; *Scotland*, university, 205; *S.A.*, 761–762

SCHOOL BOARDS, *Scotland*, 59, 65–66; school buildings, regulations, 26, *N.I.*, 82

SCHOOL CERTIFICATE EXAMINATION, see First Examination

SCHOOL SYSTEMS, re-planning of, 619–633; *British Commonwealth of Nations*, 11–115; *Foreign Countries* (see under each country for specific pages), 116–168

SCHOOL VISITS, secondary schools, value of, 399

SCHOOLS, re-planning of, 619–633

SCHOOLS, transfer of, legal notes, 249

SCIENCE MASTERS' ASSOCIATION, 435–436

SCOTLAND, administration, 61–65; Boy Scout movement, 634–643; adult education, 657–667; cotton industry, education for, 668–684; comparative diagrams, 169–183; educational system, 12–20, 65–74, 619–633; events in education, 268–278; education outside the school, 644–656; finance, 204–239; governing enactments, 59–61; legal notes, 259–267; statistics, 75–77, 231; secondary education, 518–546; religious education, 724–730; textbooks, 694

SCOTTISH EDUCATION DEPARTMENT, 204–207

SECOND EXAMINATION, administration, 26; curriculum, 38; statistics, 36, 52

SECONDARY EDUCATION, aim of, 33; curriculum, 25; general, 270, 383–401, classics, 402–416, domestic studies, 495–507, geography, 469–479; history and social studies, 459–468, mathematics, 446–458, modern languages, 417–428, music, 480–484, natural science, 429–445, physical education, 508–517, practical

subjects, 491–494, definition of, 25, examinations, 32, 37–38; fees, 31–32; finance, 188–198; statistics, 29–30, 36, 49, 50–53, 58; system of, 11, 34–38; *Australia*, system, 13, 315–316, statistics, 91–98; *Australia*, 874–875, 878–880, 883–886; *Canada*, general, 15, 87, 284–285, 547–556, 557–606, statistics, 89–90; *British Commonwealth of Nations*, comparative diagrams, 174–175, 180–181; *Europe*, comparative diagrams, 174–175, 180–181; *Central Countries*, 125; *Finland*, 912–916; *Foreign Countries* (see under each country for specific pages), 130–168; *France*, Roman Catholic secondary schools, 927–935; *I.F.S.*, general, 107, statistics, 109; *India*, The Punjab, 792–795; *Jamaica*, 865–866; *Latin Countries*, 123; *Malaya*, 844–847; *Moslem Countries*, 127; *N.Z.*, 14, 99, 329–330, statistics, 100; *N.I.*, finance, 243–244, general, 79–80, 82–83, 280, statistics, 86; *Scotland*, general, 71–73, 518–546, regulations, 62, religious instruction, 728, statistics, 75, 231; *Spain*, 900, 907–908; *S.A.*, general, 16, statistics, 103–105; *U.S.A.*, comparative diagrams, 174–175, 180–181, general, 607–618, statistics, 371–372

SEGREGATE INSTITUTIONS, India, Muslims, for the education of, 802–805

SENIOR DEPARTMENTS, P.E.S., general, 29, statistics, 28–30, 42–44

SENIOR HIGH SCHOOLS, U.S.A., 117

"SEPARATE" SCHOOLS, India, 802–805

SEYCHELLES, textbooks, 723

SIAM, general, 128, 163

SIDE SCHOOLS, Scotland, statistics, 75

SIERRA LEONE, textbooks, 715–716

SOCIAL STUDIES, teaching of, secondary schools, 459–468

SOCIÉTÉ GÉNÉRALE D'EDUCATION ET D'ENSEIGNEMENT, France, function of, 931

SOUTH AFRICA, Union of, comparative diagrams, 169–183; general, 16, 101–102, 334–349; statistics, 102–105; textbooks, 702–704; universities, 17–18, 742–781; vocational schools, 20

SOUTH AUSTRALIA, general, 92; statistics, 93, 97; textbooks, 700

SOUTHERN RHODESIA, general, 18; textbooks, 716–717

SPAIN, comparative diagrams, 169–182; general, 163–164, 891–910

SPECIAL PLACES, regulations and statistics, 32

SPECIAL SCHOOLS for Defective Children, statistics, 45, 58; *Australia*, 301–302; *Austria*, 882; *Canada*, statistics, 89; *Finland*, 919–920; *India*, Mysore, 824; *Jamaica*, 864; *N.I.*, statistics, 85; *Scotland*, statistics, 75, 231

"SPECIAL" SCHOOLS, India, 802–805

STANDARDISED TESTS, 276

STATISTICS, all institutions, 42–58; Boy Scouts, 635; boys' and girls' associations, 644–646; cotton industry, examination candidates, 672–673; juvenile instruction centres, 647–649; occupations, Merseyside classification of, 626–627; private schools, inspection of, 624; science, school courses in, 433–434; *Australia*, all institutions, 93–98; *Austria*, elementary, 882, hochschulen, 886, secondary, 885; *Canada*, 89–90, 547–556, 603–606; *Finland*, adult education, 920–921, ecclesiastical primary schools, 920, elementary education, 919, folk high schools, 920, secondary, 916, special schools, 919–920, universities, 925; *Foreign Countries* (see under each country for specific pages), 130–168; *France*, voluntary education, 933–934; *India*, all institutions, 111–115, 364, 366, Muslim education, 797–799, separate and special institutions, 803, Mysore, 819–826, Punjab, 782, 786–787, 789–790; *I.F.S.*, all institutions, 109; *Jamaica*, 872; *Malaya*, 837, 839, 842–843, 845; *Newfoundland*, 358; *N.Z.*, 100; *N.I.*, 85–86; *Scotland*, all institutions, 75–77, secondary education, advancement of, 535, twelve years' survey, 231; *S.A.*, all institutions, 102–105, universities, 743; *Spain*, primary, 903, secondary, 908; *U.S.A.*, 120–121, 371, 374–375

STRAITS SETTLEMENTS, 827–857; textbooks, 723

SUPERIOR SCHOOLS, New Brunswick, 16
SWEDEN, comparative diagrams, 169–182; general, 164
SWIMMING, general, 515–516
SWITZERLAND, comparative diagrams, 169–182; general, 164–165
SYNDICAT DE L'ENSEIGNEMENT LIBRE, France, function of, 931

T

TAMIL, vernacular schools, Malaya, 843–844
TASMANIA, general, 93; statistics, 93, 98; textbooks, 700
TEACHERS, *P.E.S.*, appointment of, legal notes, 248–249; dismissal, legal notes, 248; graduates, statistics, 48; salaries, 192–194, cost per average attendance, 201; statistics, 44, 47, 48; *non-provided schools*, legal notes, 23, 248; *secondary*, statistics, 53, salaries, 189, staffing, problems of, 409; *training colleges*, entrance, restrictions on, 273–274, regulations, 25, staffing circulars, 271–272, statistics, 40, 56; *university*, salaries, 186; *Australia*, association of, 324, Headmasters' Conference, 324–325, salaries, 298–300, supply, 302, training, 302–305; *Austria*, elementary and intermediate, 882, training, 888–889; *Canada*, general, 568–569, salaries, economy measures effect on, 285–287; *Finland*, elementary and secondary, training of, 921–922, secondary, staffing and salaries, 914–915; *Foreign Countries* (see under each country for specific pages), training of, 130–168; *France*, parents, relation to, 931; *I.F.S.*, general, 106–107, primary, 353–355, salaries, 109, secondary, 352–353, statistics, technical, 355–356; *India*, Muslim teachers, 808–809, Mysore, training of, 825–826, Punjab, general, 790; *Jamaica*, general, 863–864; *Malaya*, general, 847; *Newfoundland*, general, 357–358; *N.Z.*, general, 331–332; *N.I.*, appointment of, 80, salaries, 241–242, staffing, 81, statistics, 86, training of, 242; *Scotland*, P.E.S., legal notes, 264–266, salaries, 214–215, statistics, 76, 231, training, finance of, 209, regulations, 63, statistics, 75, 209; secondary, general, 528, statistics, 76; university, salaries, 205, statistics, 76; *S.A.*, elementary, 341–347; university, 763–766; *U.S.A.*, 372–374
TECHNICAL DAY CLASSES, statistics, 30
TECHNICAL EDUCATION (see also Further Education and Vocational), finance, 190, general, 38–40, 271, secondary schools, relation to, 395; statistics, 43, 49, 54; *Australia*, general, 91–93, statistics, 93–98; *Austria*, fachschulen, 886–887; *British Commonwealth of Nations*, comparative diagrams, 178–179, 182–183; *Canada*, 15–16; *Europe, Central Countries*, 125, comparative diagrams, 178–179, 182–183; *Finland*, 926; *France*, 933; *India*, Mysore, 823–824; *I.F.S.*, statistics, 109; *Jamaica*, 864–865, 870; *N.Z.*, general, 99, 329–30, statistics, 100; *N.I.*, finance, 244, general, 80, 83–84, 280; *Scotland*, general, 73–74; *S.A.*, general, 771–772, statistics, 104; *Spain*, 900–901; *U.S.A.*, comparative diagrams, 178–179, 182–183, general, 15–16
TEXTBOOKS, *Australia*, 305; *Austria*, 883; *British Commonwealth of Nations*, 687–723; *Latin Countries*, 123; *Scotland*, legal notes, 261–263
TRAINING AND INSTRUCTION CENTRES, Ministry of Labour, 654–655
TRAINING COLLEGES (see also Normal Schools), entries to, restrictions on, 273–274, finance, 41, regulations, 25; secondary schools, relation to, 396; statistics, 43, 56; *Foreign Countries* (see under each country for specific pages), 130–168; *Malaya*, 840–844; *N.Z.*, general, 332, statistics, 100; *Scotland*, religious instruction, training for, 729–730, statistics, 75; *S.A.*, general, 343–347, statistics, 104; *U.S.A.*, reorganisation, 380–382, statistics, 121
TRANSVAAL, general, 101; statistics, 102–105; textbooks, 704

TRINIDAD, textbooks, 720
TURKEY, general, 165–166

U

ÜBUNGSSCHULEN, Austria, 888
UGANDA, textbooks, 717–718
UNEMPLOYED, clubs for, 653–655
UNION OF LANCASHIRE AND CHESHIRE INSTITUTES, 671
UNION of Soviet Socialist Republics, comparative diagrams, 169–183; general, 126–127, 166–167
UNITED PROVINCES, India, textbooks, 712–713
UNITED STATES OF AMERICA, general, 116–121, 368–382; junior high schools, grading, 16; secondary education, 607–618; statistics, 120–121; traditions, 14–16; universities, modified freedom of, 17
UNIVERSITY EDUCATION, comparative diagrams, British Commonwealth of Nations, Europe and U.S.A., 178–179; finance, 184–188; household science, recognition of, 503–504; secondary education, relation to, 394–395; statistics, 36, 37, 51, 56, 57; students by sex and type of course, 43; traditional freedom, 17–18; *Australia*, conference on, 322, depression, effects of, 310–311; statistics, 93; *Austria*, 886; *Canada*, Provinces, 547–556, secondary schools, effects on, 570–573; *Europe, Central Countries*, 125; *Far Eastern Countries*, general, 128; *Finland*, 924–926; *Foreign Countries* (see under each country for specific pages), 130–168; *India*, British, general, 365–367, Muslim, 809–816, Mysore, 821–822, Punjab, The, general, 792–795; *Latin Countries*, general, 123, 130; *Moslem Countries*, general, 127; *N.Z.*, general, 326–329, statistics, 100; *Scandinavia*, general, 126; *Scotland*, finance, 204–207, statistics, 75–77, 231; *S.A.*, general, 742–781, statistics, 103–104; *Spain*, framework, 900, general, 908–909; *U.S.A.*, statistics, 121
URBAN DISTRICTS (see also Education Authorities, Local), education authorities, powers to become, 21–22; higher education, powers to aid, 24; statistics, 21, 44
URUGUAY, general, 167

V

VENEZUELA, general, 167–168
VERNACULAR SCHOOLS, *Europe*, Central, 125; *India*, British, 19, 110, 361–365, middle schools, decay of, 808; *Indo-China*, 852–854; *Malaya*, 827–857; *Netherlands East Indies*, 852–854; *U.S.S.R.*, 127
VICTORIA, general, 91–92; statistics, 93, 95; textbooks, 700
VILLAGE SCHOOLS, India, for Muslims, inadequacy of, 807, Punjab, The, 790–791
VOCATIONAL SCHOOLS (see also Technical and Further Education), *Australia*, 319; *British Commonwealth of Nations*, comparative diagram, 182–183; *Canada*, general, 20, 87, 586, by Provinces, 547–556; *Europe, Central Countries*, 125, comparative diagrams, 182–183; *Foreign Countries* (see under each country for specific pages), 130–168; *India*, Mysore, 823–824; *I.F.S.*, 107, 350–351; *Malaya*, 830, 847–850; *Netherlands East Indies* and *Indo-China*, 856; *Newfoundland*, 358; *S.A.*, general, 20, statistics, 103–104; *U.S.A.*, comparative diagrams, 182–183, general, 116, statistics, 121; *U.S.S.R.*, general, 127
VOLKSSCHULEN, Austria, 874
VOLUNTARY SCHOOLS, *France*, Catholic schools, 927–935; *N.I.*, statistics, 279; *Scotland*, finance, 210, legal notes, 263–264

W

WALES (see also England and Wales), secondary education, governing enactment, 21; Welsh Department, organisation of, 26
WELSH INTERMEDIATE EDUCATION ACT, 1889, 21
WELSH INTERMEDIATE SCHOOLS, statistics, 50–51
WESLEYAN EDUCATION, statistics, 40, 45
WESTERN AUSTRALIA, general, 92; statistics, 93, 96; textbooks, 700–701

WEST INDIES, BRITISH, English examinations, influence of, 18
WORKERS' EDUCATIONAL ASSOCIATION, N.Z., 329

Y

YOUNG MEN'S CHRISTIAN ASSOCIATION, 644–645
YOUNG WOMEN'S CHRISTIAN ASSOCIATION, 645–646
YUGOSLAVIA, general, 168
YUKON AND N.W. TERRITORY, general, 87–88

Z

ZANZIBAR, textbooks, 718

Printed in Great Britain
by Hazell, Watson & Viney Ltd.
London and
Aylesbury

The Royal Society of Teachers

The Royal Society of Teachers is the title given by command of His Majesty the King to the body of teachers whose names have been enrolled on the Official Register of Teachers, formed and kept by the Teachers Registration Council in accordance with the Education Act of 1907. The Council is a body representing all branches of teaching work. It numbers fifty, and is elected every five years. There are twelve University representatives, thirty-six members elected by teachers who vote according to the branch of teaching in which they are engaged, and two members who are co-opted to represent respectively teachers in the Army, Navy and Air Force, and teachers of sub-normal children.

The number admitted to Registration is nearly 93,000 out of nearly 96,000 applications. The Register is maintained for the purpose of enabling the public, and appointing bodies in particular, to choose teachers who have reached standards of attainment and professional knowledge such as entitle them to rank as members of a learned profession and to hold posts of responsibility in the teaching service. The requirements vary according to the nature of the teaching work in which the applicant is engaged or is preparing to engage, but the aim of the Council is to ensure that all teachers shall have received a good general education, followed by a course of study appropriate to their teaching work, and supplemented by a course of training in teaching, followed by a period of satisfactory practical experience.

Admission to the Register is granted to those who fulfil the prescribed conditions on payment of a single and final fee of Three Pounds. This amount may be paid by instalments. Registered teachers become Life Members of the Royal Society of Teachers, and are entitled to use the description M.R.S.T.

Particulars and Forms of Application may be obtained from:

THE SECRETARY,
THE ROYAL SOCIETY OF TEACHERS,
47 BEDFORD SQUARE,
LONDON, W.C.1.

UNITED WOMEN'S INSURANCE SOCIETY.

For Housecraft & Professional Workers.

LARGE MEMBERSHIP
EXCELLENT BENEFITS
PAID BY CORRESPONDENCE.

Write—Secretary, United Women's Insurance Society,
Murray House, Vandon St., Buckingham Gate, S.W.1.

Governing Director:
MARIA MONTESSORI, M.D. Rome, Hon. D.Litt. Durham.

THE MONTESSORI TRAINING COLLEGE

Resident Directors: { CLAUDE A. CLAREMONT, B.Sc. (Lond.),
FRANCESCA CLAREMONT.

TWO- AND THREE-YEAR COURSES FOR STUDENTS.
Board of Education Grant Available for
Deferred Third-year Course for Teachers.

INTERNATIONAL MONTESSORI SOCIETY

President: MARIA MONTESSORI, M.D. Rome, Hon. D.Litt. Durham.

ENGLISH BRANCH

President: SIR NEVILE WILKINSON, K.C.V.O., F.S.A.

For information apply to the Secretary—
Montessori Training College, Rosslyn Hill, London, N.W.3
Teachers Employment Bureau, Licensed Annually by the L.C.C.

THE MONTESSORI EDUCATIONAL FUND LIMITED

9 Queensdowne Road, London, E.5
LOANS TO TEACHERS AND STUDENTS FOR EQUIPMENT AND TRAINING.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

Founded 1834. Incorporated in the Reigns of William IV, Victoria, Edward VII and George V

Patron: H.M. THE KING

THE training of Architects and the practice of Architecture are guided by the Royal Institute of British Architects, a corporate body to which these duties have been entrusted by successive Charters granted since the year 1834 by King William IV, Queen Victoria, King Edward VII and King George V.

Containing in its membership the great majority of the qualified Architects of the Empire, it stands at the head of a confederation of allied Architectural Societies, whose sphere of influence extends, in these islands, from Inverness to Cornwall, and overseas from Canada to New Zealand. With its headquarters in London, its 63 Societies and Branches in Great Britain and Ireland, and 35 Societies and Branches in the Dominions overseas, it is an example of a closely woven and far-reaching organisation which cannot be paralleled in any other profession.

Its corporate membership comprises some 1,740 Fellows (F.R.I.B.A.), some 3,060 Associates (A.R.I.B.A.), and 2,410 Licentiates (L.R.I.B.A.). In addition to these it has three small classes of Honorary Members, some 190 in number. 4,040 Probationers and 1,620 Students make up a total of over 13,000 persons directly associated with the Royal Institute. The Allied and Associated Societies of the R.I.B.A. contain a membership of over 10,200 Architects. By means of its Board of Architectural Education it controls and inspires the system of architectural teaching throughout Great Britain, and conducts the progressive professional examinations which qualify candidates for the corporate membership, carrying with it the right to use the R.I.B.A. affix and the title "Chartered Architect." Its Practice Standing Committee is responsible for the principles of professional conduct and practice, and for the application of the R.I.B.A. Scale of Charges; its Competitions Committee regulates the conduct of architectural competitions; its Literature Standing Committee has the care of the finest architectural library in the world; its Art, Science and other Committees deal continuously with the problems that fall within their respective provinces.

To attain the Associateship of the Royal Institute a student has to follow a professional training through three stages:

(1) As a Probationer on passing a recognised Preliminary Examination.
(2) As a Student on passing the R.I.B.A. Intermediate Examination or its equivalent, and
(3) As an Associate on passing the R.I.B.A. Final Examination or its equivalent.

The Royal Institute has encouraged the foundation and growth of Schools of Architecture in various parts of the country, and certain of these Schools have received recognition for their courses for exemption from the R.I.B.A. Intermediate and Final Examinations.

The Royal Institute publishes a pamphlet which gives full information on architectural education and examinations generally. The pamphlet may be obtained at the R.I.B.A., 9 Conduit Street, W.1, at the price of 1*s.* exclusive of postage.

The R.I.B.A. Kalendar, price 3*s.* 9*d.* exclusive of postage, contains a list of Members of the R.I.B.A., etc.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS
9 CONDUIT STREET, LONDON, W.1

THE
EDUCATIONAL
SUPPLY
ASSOCIATION LTD.

The following Catalogues gladly sent to Principals on application :

SCHOOL STATIONERY—MANUFACTURED AT ESAVIAN HOUSE, HIGH HOLBORN.

SCHOOL FURNITURE—MANUFACTURED AT ESAVIAN WORKS, STEVENAGE.

SCHOOL, REWARD & LIBRARY BOOKS—OF ALL PUBLISHERS.

SCHOOL REQUISITES & STATIONERY SUNDRIES —OF EVERY TYPE.

REFERENCE LIBRARY, containing upwards of 12,000 School Books, available for Teachers.

VISITORS ARE SPECIALLY INVITED TO
ESAVIAN HOUSE 171/181 HIGH HOLBORN, LONDON :: W.C.1.

For
GUMMED PAPER
CRAFT
at its best



REGISTERED
TRADE MARK

Use "Butterfly Brand" Gummed Papers. They are strongly adhesive, attractively tinted and absolutely hygienic.

OBTAINABLE FROM ALL SCHOOL SUPPLIERS

SAMUEL JONES & CO., LTD., BRIDEWELL PLACE, LONDON, E.C.4

THE LISTENER

Five Reasons for The Listener being in every School

Contemporary Politics without Bias

Latest Scientific Developments

Eye-witness Travelogues

Best-informed Art and Literary Criticism

Beautiful Illustrations

PUBLISHED BY THE B B C
EVERY WEDNESDAY
PRICE 3d.

THE CITY OF LONDON VACATION COURSE IN EDUCATION

Principal:

THE RT. HON. H. A. L. FISHER, F.R.S., LL.D.

The City of London Vacation Course in Education, founded twelve years ago as a Refresher Course for British teachers, has now become an educational institution of wide international appeal.

The Course offers a comprehensive survey (thirteen Lecture Courses) of Modern Educational Methods in England, with special lectures for foreign students. Members of the Course have privileged opportunities for coming into contact with national and civic life in England, and for communal study and social intercourse with teachers from all over the world.

A copy of the fifty-page illustrated book of the Course will be sent free on application to The Secretary, The City of London Vacation Course in Education, Montague House, Russell Square, London, W.C.

Dates of the Course: JULY 27th to AUGUST 10th, 1934

SINGER

SEWING MACHINES

—present a lesson in Scholastic, Domestic, and Political ECONOMY

1 The Singer is the only machine which combines the lightness of touch essential to youthful operators . . . with sturdy strength of construction sufficient to withstand a long succession of enthusiastic but inexpert little hands.

2 The majority of girls will use a Singer in after-school life . . . the great percentage of sewing machines in British homes and in the great sewing industries being Singer.

3 The greatest number of British workpeople employed at any Sewing Machine factory are engaged in the production of Singer Machines at the town of Singer near Glasgow . . . and the country-wide sales and after-sales Singer Service employs thousands of other British wage-earners.

Write for particulars of other aids to better needlework teaching which go with the Singer Sewing Machine.

● SINGER SEWING MACHINE CO. LTD.
Educational Department
1-9 City Road, London, E.C.1
Local Singer Shops near all Schools.

PERIODICALS PUBLISHED BY EVANS BROTHERS LIMITED

THE TEACHERS WORLD

The Journal with the largest circulation of all weekly Educational Papers in the World. Published in Two Editions weekly—The JUNIOR School Edition, and The SENIOR School Edition. 3d. each.

PICTORIAL EDUCATION

The Monthly Magazine of magnificent full-page Pictures produced in Photogravure, with complete Teaching Notes, 1/-. Quarterly EXTRA Number published March, June, October and December, containing Pictures in FULL COLOUR. Price 1/-.

THE SCHOOLMISTRESS

(Established 1881.) The only weekly Educational Journal in England which caters *exclusively* for Women Teachers. Contains special Handicraft and Needlecraft features in every issue. Price 3d.

CHILD EDUCATION

The Magazine for Teachers of little children. 1/- monthly. An EXTRA Seasonal Number appears in March, June, October and December, with which are presented Wall Pictures in FULL COLOUR. Price 1/-.

LA FRANCE

The weekly illustrated French paper for use in Schools and Colleges. 8 pages. Price 2d.

THE MUSIC TEACHER

For professional teachers of music. Expert advice—practical, helpful, interesting and stimulating. Price 1/- monthly.

MUSIC STUDENT

The Music Magazine for students of all ages. Price 6d. monthly.

THE WOODWORKER

For skilled and amateur craftsmen. Every issue is full of new ideas and designs for making practically everything wanted for the home. Used extensively in woodwork and handicraft Centres. Price 6d. monthly.

MONTAGUE HOUSE, RUSSELL SQUARE, LONDON, W.C.1

EVANS UNIVERSAL PROJECTOR

THE PERFECT ILLUSTRATOR for all CLASSROOM LESSONS

Evans Universal Projector gives brilliant reproductions in full natural colours of any printed matter, no slides or films being necessary. It is the lowest-priced efficient episcope on the market.

Evans Universal Projector is supplied as a complete projection outfit, with Anastigmat lens f3.5, translucent screen, screen frame, flex, 3 picture holders and two projector lamps each 250 watts to suit any voltage.

THE INCLUSIVE PRICE IS ONLY £15 15 0

Send for Free Descriptive Booklet to

EVANS BROTHERS, LIMITED

MONTAGUE HOUSE, RUSSELL SQ., LONDON, W.C.1

Send to FOYLES FOR BOOKS!

We have over two million volumes in stock, including almost all the best new and second-hand books on every subject. Our catalogues are free on mentioning your interests and we attend to post-orders quickly and efficiently.

119–125 CHARING CROSS RD., LONDON, W.C.2

Telephone: Gerrard 5660 (seven lines)



MONTAGUE HOUSE
RUSSELL SQUARE
LONDON
W.C.1

MESSRS. EVANS BROTHERS extend to all Educationists a very cordial invitation to visit Montague House during their visits to London. They would welcome the privilege of interesting Educationists in the many Educational activities of the House.

INDEX TO ADVERTISEMENTS

	PAGE
City of London Vacation Course in Education	956
Educational Supply Association Ltd.	954
Evans Brothers Ltd.	958 and 959
Evans Universal Projector	959
Foyle, W. & G., Ltd.	959
Jones, Samuel & Co. Ltd.	954
"Listener," The	955
Montessori Training College	952
Royal Institute of British Architects	953
Royal Society of Teachers	951
Singer Sewing Machine Co. Ltd.	957
United Women's Insurance Society	952